

Report on the Settlement of the
Province of Orissa
1950


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CHAPTER I.

Area under report.

1. The jurisdiction of the Commissioner of Orissa and Superintendent of the Tributary

Mahals comprises—

Seventeen Tributary States, with an area of	...	14,387
Outback district, with an area of	...	8,608
Balasore " " "	...	2,077
Puri " " "	...	2,499
Angul " " "	...	1,681
		<hr/>
Total	..	24,307*

The Tributary States pay a quit-rent fixed in perpetuity, while in the three districts the temporarily-settled area amounts to about 6,000 square miles, of which 2,300 are situated in Cuttack, 2,000 in Puri, and 1,700 in Balasore. Out of this area (6,000 square miles) the Khurda Government Estate comprises about 1,000 square miles. The resettlement of this Estate was completed last year by the Settlement Officer of Orissa and his assistants, and has formed the subject of a separate report already submitted to the higher authorities. It is only necessary to say here that the work was done under the immediate supervision of Mr. James Taylor, Assistant Settlement Officer, and that rents for some two hundred thousand tenants were raised from Rs. 3,00,000 to Rs. 3,77,000, the actual annual gain of revenue to Government being Rs. 55,000 and the cost of the operations, Rs. 1,92,000.

Area surveyed

2. The area dealt with by the Survey Department in Orissa is returned as follows:—

Cadastral Survey.				Topographical Survey.
				2-inch and 4-inch to the mile.
District.	64 inch to the mile.	32-inch to the mile.	16-inch to the mile.	
Outtask	...	6	364	2,412
Balesore	7	1,858
Puri	998	1,026
Total	...	6 +	1,364 +	5,296
				6,666

With the exception of the 32-inch work nearly the whole of the survey was original, the areas under canal irrigation and the Khurda Government Estate having been surveyed on the 32-inch scale some fifteen to twenty years ago.

* The amount of this note is given in paragraph 504.

3. In this report I have only dealt with the temporarily-settled area of 5,000 square miles (excluding the Khurda Government Estate). In this area rents have been settled

Temporarily-settled area.

for some fifteen hundred thousand tenants, and the Government revenue of nearly six-and-a-half thousand estates has been raised from nearly fourteen lakhs of rupees to more than twenty-one lakhs. The operations lasted from the end of 1889 to the end of 1899; and in addition to the work in the temporarily-settled area, the Settlement Department was entrusted with settlement work in the large Ekhrajat and Satais Hazari Estates belonging to the Puri Temple; with several minor operations in Khurda; with the record of rights in portions of *Killa Darpan* and *Killa Aul* (both permanently-settled); and with the record-of-rights and settlement of rents in *Killa Madhupur*, a permanently-settled estate under the Court of Wards.

4. The report is divided into seven parts:—

Divisions of the report.

Part I.—*Statistical*.—Chapters II, III, and IV contain brief statistical accounts of the temporarily-settled areas in Cuttack, Balasore, and Puri (excluding Khurda, already dealt with in a separate Settlement Report). These Chapters serve to bring up to date the information given by Sir W. W. Hunter in his Statistical Account of Orissa.

Part II.—*Economical*.—In this Part economical matters, other than the relations between landlord and tenants (relegated to Part III) are dealt with. Chapter V contains an account of the Irrigation and Protection works in Orissa and of the enquiry made regarding the proposal to introduce an owner's rate. The information regarding Embankments may be supplemented by the History of Embankments in Orissa lately written by Mr. W. A. Inglis, Superintending Engineer. In Chapter VI an attempt has been made to supplement the information on Agriculture given by Mr. N. N. Banerjee and Mr. M. H. Arnott. Chapter VII gives a history of prices, and chiefly deals with the prices of common rice. In Chapter VIII the material condition of the people is described, and an account is given of the wealth of the Province and of the famines which have at times overwhelmed it.

Part III.—*History and Land Tenures*.—In Chapter IX a brief account is given of ancient Orissa, its history and its religion, so far as may be gathered from the writings of certain well known authorities. Chapter X contains a history of the early Revenue Settlements; while in Chapter XI the history of the Land Tenures is brought down to the present day. In Chapters XII and XIII the relations between landlord and tenant, and the laws which govern these relations, are dealt with.

Part IV.—*Procedure*.—In this Part an account is given of the procedure adopted in different stages of the work. So far as possible, the results of the work have been relegated to the next Part (Part V). These chapters have been written, at considerable length for the benefit of the Settlement Officers of 1927. Great difficulty was experienced in discovering the procedure at the last Settlement, as details were not set forth in any one place, and a search in Recordrooms, in manuscripts, and even in printed papers involved a considerable expenditure of time. For this reason the chapters on procedure have been written very elaborately (see also Appendix A).

In Chapter XIV a general account of the procedure is given, together with some references to the officers employed on the work. Chapters XV, XVI, XVII, XVIII, XIX, and XX follow the regular sequence of the procedure from the stage of demarcation and survey, through the stages of *ghanapuri*, attestation, settlement of rents, and settlement of revenue, up to the last stage of arrangement of the final record and its maintenance.

In Part V there are two Chapters—XXI and XXII—describing the results of the work, so far as areas and so far as rents and revenue are concerned.

In Part VI there are also two Chapters. Some account of the permanently settled estates, Tributary States, and the *Killas* eligible for specially lenient treatment is given in Chapter XXIII; and Chapter XXIV contains an account of the revenue free areas, almost inextricably intermingled with the temporarily settled revenue paying area under report.

Part VII consists of one Chapter (XXV) containing a brief account of the cost of the operations.

5. The Appendices contain the following information:

Appendices.

Appendix A gives a reprint of important correspondence; in Appendix B are the rules under section 189, Bengal Tenancy Act, and the rules prescribed for record writing and attestation. The rules for settlement of rents and assessment of revenue are contained in Appendix C. Appendix D contains certain forms illustrating village areas. In Appendices E and F the *Milan Khassa* (statement showing the areas of villages under heads 'Cultivated', 'Culturable', etc.) and the crop statements are compiled. Appendix G contains a reprint of the note on the embankments classified by Mr. C. W. Odling. Appendices H to M show lists of roads, bungalows, ferries, grazing grounds, and public lands. Appendix N contains a list of prices of commodities sold at the Bhadrak *Adi* and Appendix O gives an account of a raiyat's annual expenditure. In Appendix P there is a statement showing how rents have been altered. Appendices A.A. to E.C. give figures for rents and incidences, and F.A. to F.C. for revenues. Appendices G.A. refer to tenure holders (proprietary)—K.A. and K.B. give figures for rents payable to under-tenants. L.A. to L.C. show revenue for areas; M.A. to N.C. give an account of the zamindars in the Province. In O.A. and P.A. Mr. Carey's notes on the *Aml* year and Kists are reprinted. At the end of the Appendices will be found the reports by Messrs. D. H. Kingsford and H. McPherson on the settlements of Balasore and Puri. Mr. James Taylor's Report on Khurda has been published separately and separately dealt with.

6. I cannot conclude this introductory preface without an expression of my deep sense of gratitude and obligation to Mr. J. E. Webster. With the exception of the introductory chapters and the chapters containing reviews of general results, he has either written or drafted a very large portion of the report. He is thus largely responsible for its form, matter, and manner. Mr. Webster possesses the most complete knowledge of the literature of the old Settlements, as well as of all the details of the Bengal Settlement laws. My gratitude to the other convenanted officers (Messrs. H. McPherson, Carey, and Kingsford) who have worked with me has been expressed in the Introductory Chapter to Part IV. In that Chapter the names of other Assistant Settlement Officers have also been recorded, and I would only mention here the name of Mr. James Taylor as responsible for carrying out the Khurda Settlement. In addition to the work of inspection and organisation done by the above officers, I would ask permission to draw attention to the very able reports written by Mr. H. McPherson on Puri, Mr. Kingsford on Balasore, and Mr. James Taylor on Khurda. A record is also made in Part IV of the very valuable work done by Messrs. Maude, Walsh, and Nathan during the first six years of the Settlement operations. On account of ill-health they were unable to complete their work, and it was thus left to others to reap the fruits of their labours. Extracts have been made (not always with due acknowledgments for the great assistance they have given us) from the historical works of Stirling, Toynbee, and Hunter, and from the orders and reports of Directors of the Department of Land Records—Messrs. Finucane, Macpherson, and Lyon. I beg leave to express here my very great obligations to all these authorities.

CHAPTER II.

PHYSICAL AND STATISTICAL ACCOUNT OF THE CUTTACK DISTRICT.

7. Cuttack, or Katak, the central of the three districts of Orissa, is bounded on the north by Balasore, on the south by

Situation and Boundaries.

Puri, on the west by the Tributary States of Keonjhar, Dhenkanal, and Atgarh, and on the east by the Bay of Bengal. The boundary between Balasore and Cuttack is the river Baitarni* which, issuing from the Keonjhar hills, flows into the Dhamra estuary.

Between Puri and Cuttack there is no natural boundary; it has been proposed to make the right banks of the Mahanadi river and of its branches,

* See Notification No. 2205 of the 15th May, 1906 which transferred several villages from Cuttack to Balasore, and vice versa.

the Katjuri, and, lower down, the Deb, the dividing line, thus transferring to Puri about 327 square miles comprising the whole of *Killas* Banki, Patia and Dompapa, and of parganas Sauri, Bahurupa, and portions of parganas Bakhra-bad, Sujanagar, Kodinda, Saibir, Sailo, Deogāon, Kāte, and Benahar. The transfer would have the effect of equalising the size of the two districts, but, if we except *Killas* Dompapa and Banki, which might be attached to the sub-division of Khurda, the remaining area is more readily accessible from Cuttack than from Puri.

8. The number of villages or "mauzas" in the district is, according to the census of 1881, 12,841, and according to the census of 1891, only 5,429. In the present Settlement the number was found to be 6,347, viz.—

Thana.				
Tirtol	...	...	...	817
Kendrapara	...	...	...	665
Patamundai	...	...	...	394
Aul	...	...	...	553
Dharmasala	...	...	...	1,306
Cuttack	...	...	...	416
Salepur	...	...	...	699
Jajpur	...	...	...	703
Jagatsingpur	...	...	...	794
Total				6,347

Out of these, 4,605 are dealt with in this report. They have an average area of 300 acres each.

9. In 1872 the population was returned at 14,94,784, in 1881 at 17,38,165; and in 1891 at 19,37,671 persons.

That is to say, in the first ten years it increased by more than 16 per cent., and in the next decade by nearly 12 per cent. Assuming, then, an increase of 1 per cent. per annum as a safe amount, we get the present population as nearly 21,00,000, of which, taking the proportion of males and females, viz., 95 to 100, found at the last census to still subsist, the number of males is about 10,25,000 and of females, 10,75,000.

The average number of persons to the square mile is 573; and population is densest in Salepur, Jagatsingpur, and Jajpur thanas, and least so in Aul, Dharmasala, and Tirtol.

Roughly, we may take the distribution by religions to be—

Hindus, 97.1 per cent.	...	...	20,39,000
Mahommedans, 2.7 per cent.	...	...	57,000
Christians, .14 per cent.	...	...	3,000
Others	...	...	1,000

10. The total area of Cuttack District is 3,663 square miles, of which 752 square miles, contained in Kujang, Kanika, and Banki, have already been dealt with in previous Settlement Reports. For another 717 square miles in the permanently settled estates of Sukinda, Darpan, Kalkala, Patia, Dompapa, Harisipur and Bishunpur, details of the cultivated and uncultivated area are not available. For the remaining 2,194 square miles comprising all the temporarily settled estates, besides pargana Derabisi (of *Killa* Aul) *Killa* Madhupur, *Killa* Chhedra and the

revenue-free and permanently-settled lands within the temporarily-settled parganas, the following figures have been compiled* :—

	Acres.
Total area	14,08,600
Cultivated (including homestead lands)	9,76,800 or 70 per cent.
Culturable	68,300 or 5 "
Unculturable	3,59,700 or 25 "

Map No. VI shows the extent to which the several parganas are cultivated. As might be expected, it is generally along the western border, where there are large areas still under jungle, that the percentage is lowest. In a few also of the central parganas, such as Karimul and Outtack Haveli, the large area covered by the bed of the Mahanadi keeps down the proportion of cultivated land.

Details of the culturable are as follows :—

Culturable Lands.

	Acres.		Acres.
New fallow	31,300	Thatching grass	1,900
Old fallow	24,400	Culturable jungle	10,700

Nearly a quarter of the new fallow lies in Cuttack thana and consists mostly of high lands capable of growing crops in favourable seasons only ; and the next largest area is in Jajpur, where it is to a great extent now cultivated with *dálua* or spring rice (see paragraph 11).

The old fallow may or may not be culturable at present, but if some of it is not, there are probably portions of the so-called unculturable waste that may eventually be reclaimed. Nearly a third of it is in Jajpur Thana, where it is low-lying and heavily inundated and somewhat saline, but affords grazing to large herds of cattle throughout the cold and hot weather. The thatching grass forms a valuable property, and is chiefly found in parganas Bakhrabad and Tapankhand, and in Madhupur and the neighbouring *Killajit* estates. The culturable jungle consists chiefly of low scrub at the foot of the Bakhrabad, Dalijora and Sukinda hills, and it is very doubtful if much of it will come under the plough during the next thirty years, but it might be used for orchards or plantations.

From this 68,300 acres of culturable land we have, however, to deduct at least half the area reserved for grazing and other purposes.

Altogether the reserved lands consist of—

Grazing Lands.

	Acres.
Grazing grounds	48,808
Cremation grounds	6,180
Tanks, &c.	341

The last two are generally unculturable, but taking half the grazing ground to be culturable we have only 43,900 acres left to be brought under the plough, and it is to be hoped in the interests of the cattle that most of this land may be spared to them.

The unculturable lands are made up as follows :—

	Acres.		Acres.
Houses	10,800	Government roads	4,050
Tanks and rivers	1,00,700	Other roads	9,600
Canals	5,000	Burning ghâts	3,450
Embankments	6,500	Waste, &c.	2,14,800
Jheels	5,300		

11. Rice† is by far the most important crop, and is grown in three distinct ways as—*sarad*, or winter rice sown in June-July and reaped in November-January; *biak* or autumn rice sown in May-June and harvested in August and September, and *dálua* or spring rice sown in November-December and harvested in March. Map No. VI will show at a glance the proportion under rice—*sarad* and *biak* combined—in different parts of the district, and further details will be found in Appendix F.

After rice, the most important cereal is *māndiu*¹, a millet grown both as an autumn² and as a spring³ crop. Wheat and barley are cultivated but to a very small extent. *China*⁴ is more largely grown but is not of much importance, and after rice it is on the pulses sown in the autumn and harvested from January to April that the people mostly depend.

Of these the commonest is *kulthi*⁵ grown on very inferior lands (often after *māndua*), and *birhi*⁶ a small plant somewhat resembling *kulthi* in its habit but producing quite a different grain. The *kulthi* seed is a dark, flat and pointed bean which makes an excellent food for cattle and horses and is boiled and eaten with rice by the poorer classes and even taken alone in time of scarcity. *Birhi* produces a little round reddish pea largely used as *dāl*; it is a more valuable plant and generally follows *bāli* rice. *Muga* or *mung*⁷ is one of the most valuable pulses and resembles *birhi*, except that it is usually grown on *sarad* lands. It is chiefly found in the flooded tracts.

On riverside lands *harar*⁸ is sown and gives a valuable crop, though it is said to be too indigestible to be taken alone as food.

Oil seeds, viz., linseed *tīl* and mustard are raised on silt-covered lands after a crop of rice, and the castor seed is sown for choice in a mixture of sand and silt, as it will grow in a depth of sand that would kill almost any other crop.

Sugarcane is grown on irrigable fields, and so are to some extent jute and cotton; dyes are of small importance, though there is an indigo factory at Kenduapatna; but condiments and spices are very generally grown in garden lands, especially coriander and turmeric.

Tobacco is an important and valuable crop, being grown everywhere on silt-covered lands, but more especially along the lower basin of the Kātjuri in parganas Deogāon, Kāte and Saibir.

*Pān*⁹, though covering but a small area, is very valuable. It is not grown everywhere but is found chiefly in Kodinda, in Kāto, in Sungra, and in Tisania.

Among vegetables the *sāru*¹⁰ and the brinjal, pumpkins of many kinds, and onions, are the most important. Potatoes have been introduced, but are not yet widely known. Arrowroot is said to be grown by Native Christians only.

Among fruits, plantains are found in most villages and mangoes grow freely and form a valuable food during the hot weather, though very inferior in taste to those of Bombay or Malda; pineapples are also common throughout the district. Other fruits are the *bael*, jack, tamarind, Indian plum and custard-apple.

In round figures the areas under the several crops, (excluding Kanika, Kujang, Banki, and 717 square miles not under Settlement) are as follows¹¹:—

Area under crops.

Winter rice.—6,85,000 acres or 70 per cent. of the nett cropped area, grown in every part of the district.

Autumn Rice.—1,28,000 acres or 13 per cent. of the nett cropped area. The distribution of the winter and autumn rice is shown in map No. VI.

Spring Rice.—17,000 acres or 2 per cent., chiefly in the low lands near the estuaries of the Kharsua and Brahmini rivers.

Māndua.—29,000 acres or 3 per cent., chiefly in central Cuttack.

Other Cereals.—1,000 acres.

Pulses and other food grains.—1,63,000 acres or 17 per cent. Found everywhere, but most general on high riverside lands.

Castor.—1,000 acres. Most common in the country between the Brahmini and Kharsua.

Other oil seeds.—8,000 acres. Chiefly in Deogāon and Saibir and the valley of the Kātjuri; also along the lower reaches of the Chitratola and Nuna rivers.

Tibres.—2,500 acres, of which two-thirds is cotton. Chiefly in the irrigated tracts.

¹ *Eleusine coracana*.

² Bhadai.

³ Rabi.

⁴ *Pericum miliaceum*.

⁵ *Dolichus biflorus*.

⁶ *Phaseolus radiatus*.

⁷ *Phaseolus mungo*.

⁸ *Cajanus indicus*.

⁹ Betel.

¹⁰ A variety of *Arum*.

¹¹ See Appendix F.

Tobacco.—3,200 acres. Of this nearly 2,000 in Jagatsingpur Thana alone.

Pin and other Drugs.—200 acres. Chiefly in Salepur, Jagatsingpur and Cuttack thanas.

Yams, Brinjals and other vegetables.—2,000 acres, besides what is included in the 52,000 acres of homestead land.

Garden Produce and Fruit Trees.—21,000 acres.

The figures given in the last two paragraphs refer only to the 2,194 square miles shown in the *Milan Khasras*.

In Banki, Kanika, and Kujang the cultivated area is 317 square miles, and we may take the cultivated area of the remainder at one-half of 717 square miles, thus making the total area of the district under cultivation 2,200 square miles.

12. Numerous as they are, the rivers are not now very largely used as

Communications.

(a) By water.

waterways. From Sambalpur to Cuttack boats come down the Mahanadi, and there is some little traffic on the upper waters of the Brahmini, but on

the whole the rivers are, except in the tidal reaches, too shallow and too uncertain to be very much used.

The bulk of the heavy passenger traffic between Cuttack and the neighbouring districts was carried by road and canal; I say "*was*" for a new route, the East Coast Railway, was opened in 1899.

The Kendrapara and Gobri Extension Canals connect Cuttack with the Brahmini at Alba, and from there boats go down the river to Chandbali, where cargo is transhipped and carried by steamer to Calcutta.

The Taldanda Canal between the Mahanadi and Katjuri rivers connects Cuttack with False Point, from which rice is shipped chiefly to the Mauritius. The High Level Canal supplies a direct route between the marts of Cuttack and Bhadrak.

There has been some talk of making the Machgaon Canal available for navigation and of extending it to Machgaon so as to obtain a third route to the sea *via* the Deb river, but it is doubtful whether the Deb would prove fit for the entry of any but very small boats, and there is no reasonable prospect of the scheme being carried into execution. I do not myself consider that there is now much need for further extension of the canal system, the district being already remarkably well served.

13. Roads* of three classes are maintained:—

Communications.

(b) Roads.

(1) *Provincial Roads*, paid for out of provincial funds and in charge of the Public Works Department.

(2) *District Board Roads*, paid for from the District Road Fund and in the immediate charge of the District Engineer. Total length 464 miles, of which 25 are metalled.

3) *Local Board Roads*.—Roads of purely local utility paid for out of the District Road Fund but in charge of Local Boards.

First among the Provincial Roads ranks the Grand Trunk, the highway from Midnapore in Bengal to Ganjam in the Madras Presidency. It enters the District at Akhoyapada, 46 miles from Cuttack. It is raised and metalled, and crosses the Baitarni, Kharsua, Brahmini, and Mahanadi rivers by ferries, and is provided with bungalows at Akhoyapada, Khandetar, Dharmasala, Barchana, Tanghi, and Cuttack.

Skirting the western hills it reaches Cuttack town, where it divides into two, the Cuttack to Puri road, and the Cuttack to Ganjam road, the former being generally known as the Jagannath Road†. This road was constructed between 1811 and 1819 in place of the old Pilgrim Road, of which traces are yet visible in ruined but massive bridges in the Hindu style of architecture standing in solitude over streams where there is neither road nor traffic.

There are 2 other Provincial Roads; the first, from Cuttack to Sonapur, is mostly unmetalled. It lies up the valley of the Mahanadi and along the right bank through Banki. The other, from Cuttack to Sambalpur, is a new road through Atgarh up the left-hand valley of the Mahanadi.

* See Appendix H.

† See Toynbee's *History* page 82, paragraph 42 below.

The principal District Board roads leading to Cuttack are—

- (1) *Cuttack to Taldanda*.—44 miles along the south of the Mahanadi 18½ miles metalled with laterite; a fair road all the year round.
- (2) *Cuttack to Machgaon*.—Leaves the last road at the 11th mile, and runs 32 miles to Machgaon on the Deb river. Metalled to 14th mile from Cuttack. Carries a heavy grain and salt traffic.
- (3) *Cuttack to Chandbali*.—63 miles, of which two are metalled. Crosses the Mahanadi at Cuttack and the Brahmini at Patamundai on the 50th mile. Passes by Salepur, Kendrapara, Aul, and Patamundai Thanas.
- (4) *Fulnakhera—Madhab road*.—From 10th mile of Puri road along the border of the district to Madhab, 25 miles, and so on to Puri. A fair road to the 15th mile.

The above are the chief roads by which the produce of the country is brought to Cuttack; the principal cross and feeder roads are the following:—

- (5) *Tanghi to Haripur*.—Connects the Garhjats with Tanghi on the Grand Trunk road; 10th mile.
- (6) *Jajpur to Kuakhia*.—9 miles from Jajpur, through Beruan to Kuakhia, at the 80th mile of the Grand Trunk road. A fair road with two ferries.
- (7) *Jajpur to Kendrapara*.—25 miles; Kharsua and Brahmini unbridged. A very bad road in parts, and impassable in high floods.
- (8) *Baruan to Kalamatia*.—16 miles, joining the last two roads. A bad road in the rains.
- (9) *Jajpur to Pachikot*.—19 miles to Ragri in the extreme north-west. A fairly good road partly bridged.
- (10) *Jajpur to Kyanti*.—17 miles in a south-easterly direction. A fair-weather road, Bengu nala being unfordable when high.
- (11) *Beruan to Balichandrapur*.—14 miles through the hills of Alti; four unbridged rivers to cross.
- (12) *Salepur to Chatia*.—From Salepur on the Kendrapara road to Chatia on the Grand Trunk road; 18 miles with two rivers to cross. Is almost impracticable for carts in the rains.
- (13) *Patamundai to Sudipur*.—11 miles. A good road; unmetalled.
- (14) *Jagatsingpur to Jaipur*.—8 miles, joining the Taldanda and Machgaon roads.
- (15) *Jagatsingpur to Tirtol*.—9 miles, joining the Taldanda and Machgaon roads.

This is by no means a complete list, but the above are the principal roads under the District Board; and the accompanying map will give a fair idea of the road system of the district. On the whole it is very well supplied, and there has been a very great advance since the time of the last Settlement. There are, however, still many villages accessible only to pack bullocks, and many only by boats in the rainy season.

In the east parganas Benahar and Khandi are poorly supplied, so is the strip of country between the Taldanda and Kendrapara canals. Generally, however, the District Board appear to have done their best, and if there are large areas very difficult of access, the nature of the country, intersected as it is by rivers, sufficiently accounts for this.

Village roads, however, leading to the district roads are very badly kept, and a great improvement would be effected if the villagers would combine to keep in repair fair weather paths to their houses and fields.

14. The District is very well supplied with staging and inspection bungalows. There are bungalows at every stage (about 10 miles) along all the provincial roads—the Cuttack-Chandbali road, the Fulnakhera-Madhab road, the Taldanda road, and the Machgaon road; also along all the canals, and at Beruan and other central positions.

A list of these bungalows is given in Appendix I.

15. The year 1899 saw the opening of the Bengal-Nagpur Railway line, which, when complete, will connect Cuttack directly with Madras and Calcutta. Within the District there will be stations at Cuttack, Tanghi (Kapilas Road), Jenapur, and Jajpur Road.

The Railway.
What its ultimate effect on the prosperity of the country may be it is impossible to say. Already the demand for labour created by it has sent up wages, and it is unlikely that they will ever again fall to quite their former level.

It is doubtful whether it can hope to compete successfully with steamers in the rice export traffic unless branch feeder lines are extended into the rice-growing districts, towards Taldanda to the east and Sambalpur to the west. The stations on the main line are so placed that they may receive all the grain now brought into Cuttack town and all that is brought down from the Tributary States, but it is by no means certain that they will get the river-carried rice from Sambalpur, and it is highly improbable that the railway can seriously interfere with the Chandbali or False Point trade.

16. There are only three towns of any importance in the District.

Cuttack, the present capital of the District, first sprang into importance in the tenth century, when the protecting dykes were built and the fort constructed by the Hindu king Makar Kosari. It was the head-quarters of both the Mogul and Mahratta administrations, and for many years after its first occupation by the British gave its name to the whole Province.

It contains, besides the district offices, the offices of the Commissioner of the Division and of the Superintending Engineer in charge of the canals and embankments of the Province. In the old fort, a wing of a Madras regiment is still stationed.

It had a population, according to the last census, of 47,186, and now probably holds little less than 60,000 souls. It stands at the apex of the delta formed by the Mahanadi and Katjuri rivers, and is protected from inundation by embankments solidly revetted with stone.

The Grand Trunk road and the new railway line pass through, and almost all the principal roads of the District converge on, it, and it has a large and steadily increasing trade.

It is curiously devoid of fine public buildings. The little English Church, the Collector's offices, and the Lallbagh House are all handsome buildings in their way, and standing on the river banks present a fine view to the approaching visitor's eye, but there is not a single ancient temple of interest, and but for the old fort gate and moat and the river revetment there is hardly any sign of the town's antiquity.

Jajpur, the ancient capital of Orissa, and now the head-quarters of the subdivision of that name stands on the right bank of the Baitarni. The population, according to the last census, was 11,992. The chief importance of the town is as a resort of pilgrims, there being comparatively little trade. It contains many interesting buildings, among which the most striking are the temples of *Biroda Devi*, of the *Boar** incarnation of *Vishnu*, and the great sun pillar that stands a mile outside the town. This latter consists of a huge and beautifully proportioned column of stone raised on a solid pedestal, and if the temple was in proportion, it must have been of remarkable size. All traces of it have, however, disappeared, and the column has only escaped owing to its great weight, which prevented its would-be destroyers from moving it. Tradition says that the stone was brought from the hills of Alti; but how such a heavy mass was carried across rivers and fields remains a puzzle to the cleverest engineers.

Besides these there are some ancient heroic figures of gods and goddesses standing and lying in the compound of the subdivisional office. They are considered to be very fine specimens of Hindu art, but all bear traces of Mahomedan vandalism in their mutilated features, from which the noses were cut by the renegade Kalapahar. Indeed, the idol of *Biroda* is said to be the only one who escaped the fury of that iconoclast, she having taken refuge in the belly of a crocodile until the danger had passed. Interesting, too, are the grim features of the seven mothers of the earth in a dark little gallery by the river bank; but

(*) *Boar*. For an account of this see page 265, Vol. I, of Hunter's Orissa.

there is little beauty in any of these early works, and it is rather the crudeness and grotesqueness of the sculpture that attract. The Mahomedan mosque built by Nawab Abu Nasir in the seventeenth century is an elegant building and has lately been restored by the Public Works Department.

Kendrapara, the head-quarters of the other subdivision and the second town of importance in the District, was also a place of considerable sanctity. It had a population, at the last census, of 17,647 persons, and its position on the Kendrapara Canal and in the centre of a rich grain-producing country gives it a considerable trade. It is connected by road with Cuttack, Jajpur, and Chandbali, and is the residence of many well-to-do persons. Besides the subdivisinal buildings, it has a good school and dispensary, and a public library has lately been opened for the supply of English and vernacular literature.

17. In spite of the extent of sea face and the many estuaries by which its rivers flow into the Bay of Bengal, the District does not contain a single harbour capable of sheltering ships of any size. As late as 1866, the export trade was carried on from False Point at the mouth of the Mahanadi, where ships have to anchor in a comparatively exposed roadway, and loading and unloading can only be done in fair weather. At present there is still a considerable export of rice, chiefly in sailing ships from False Point to the Mauritius, but most of the trade passes through Chandbali in the Balasore District at the mouth of the Baitarni. There is a deep channel up the Devi river as far as Machgaon, but, like all the other estuaries, this too has a bar of sand across the mouth that prevents the entrance of vessels of any size except at high tide.

18. Cuttack imports large quantities of kerosine oil, salt, cotton twist and piece-goods, spices, gunny bags, sugar and other miscellaneous articles. The total value it is very difficult to estimate, as the returns for Chandbali port do not differentiate between the imports for Balasore and those for the Cuttack District.

Allowing that two-thirds of the trade of Chandbali is on account of Cuttack, the total value of the imports into Cuttack was about Rs. 50,00,000 in 1897-98.

The principal exports are rice and hides, making up, with brassware, timber, and stonewares, and grains of various sorts, a total value of about Rs. 60,00,000.

There are no manufactures of great importance. Salt, which was manufactured to the value of about 4 lakhs annually, has been discontinued; country cloth is woven in many villages and is largely used by the people, but is not exported. The brass work is said to be good of its kind, and some is exported both in the form of household utensils and in the shape of small bells and figures used in Hindu worship.

Blankets are made in some villages of Tapankhand, and silk is spun in places along the foot of the hills. Cuttack silver filigree work is a speciality, but the manufacture is confined to but a few persons.

19. For administrative purposes the District is divided into three subdivisions; (1) the Sadar or Cuttack Subdivision, (2) the Kendrapara Subdivision, (3) the Jajpur Subdivision. Each of the last two is under a Deputy Collector, who is immediately subordinate to the Magistrate and Collector of the District. The subdivisions are for Police purposes divided into *thanas*, viz:—

	1.—Cuttack Thana.
Sadar Subdivision	2.—Banki "
	3.—Jagatsingpur "
	4.—Tirtol "
Kendrapara Subdivision	1.—Kendrapara "
	2.—Patamundai "
	3.—Aul "
Jajpur Subdivision	1.—Jajpur
	2.—Dharmasala

For revenue purposes the District is divided into 77 parganas, besides the permanently-settled estates of Aul, Kanika, Kujang, Kalkala, Darpan, Sukinda, Harispur, Marichpur, Dompara, Patia and the Khas Mehal of Banki.

The ultimate unit of division is the estate, of which there are 4,465, besides about 73,000 revenue-free estates.

The revenue-paying estates may be classified as follows :—

CLASS.	Number.	Area in sq. miles.	Revenue.
			Rs.
Permanently settled ...	11*	1,835.1†	79,700
Temporarily settled, with revenue of over Rs. 10,000	5	150.2	1,09,600
Revenue of—			
Rs. 1,000 to Rs. 10,000...	208	897.8	6,20,900
Rs. 100 to Rs. 1,000 ...	1,204	603.1	3,82,500
Rs. 50 to Rs. 100 ...	594	68	42,700
Rs. 10 to Rs. 50 ...	1,457	55.8	37,500
Rs. 10 and under ...	981	7.9	5,200
Killajat ...	3	49.7	Not yet settled.‡
Tanki Bahal Estates ...	2	0.3	22
Total ...	4,465	3,667.9	11,78,122

The whole of this land revenue will not become due for ten years, owing to the *rasadi* terms allowed in the case of large increments.

Physical Divisions.

20. The surface of the District falls according to its natural features into three main divisions. To the west a strip of high sterile land and rocky hills covered with thorny bamboo or scrub jungle and intersected by narrow valleys. The greater part of this region is occupied by the permanently-settled estates of Sukinda, Darpan, Kalkala, Patia, and the *Killajat* estates of Balarampur, Ragri, Chausatipara, and Kantajhar, once the strongholds of almost independent border chieftains and still known as *killas* or forts. Dalijora and Bakhrahad are the only temporarily-settled parganas having any considerable area within this zone. Shergarah, though even more westerly, is a high, dry plateau, in no way resembling the neighbouring *killas*. East of this region lie the wide alluvial plains forming the delta of the Mahanadi, Brahmini, and Baitarni rivers. They have a gradual but steady slope from the high lands of the west to the sea, and a composition varying greatly according to the relative proportion of the sand and silt of which they are formed.

The surface is generally level, but is broken by the hills of Alti and Matkotnagar in the centre, and is cut up by numerous river channels.

It is fairly wooded, especially in the central portion; mango, banyan, and pipal trees being common, and cocoanut, toddy, and date palms found in most well-to-do villages. The banyan trees particular are very fine; one at Kuhunda in Jajpur under which a cattle fair is held, covering about an acre.

East again from this area are the low lands of the sea coast, treeless expanses of rice land and grass, full of swamps and saline creeks, sloping down into impenetrable morasses, the haunt of wild hog and deer, and enormous crocodiles. Almost the whole of this third division is contained in the permanently-settled estates of Kujang, Kanika, Aul, Haripur and Bishunpur, though the parganas of Bara, Kaima, Bautara, Hatimunda and Utikan, belong rather to this than to the central division.

For an account of the geological formation of the District, I would refer to Messrs. Blandfords' report on the portion of the Cuttack District examined by them in 1855-56, from which I here quote the following :—

"From the plain, small isolated steep hills rise in a few places to the north of Cuttack and taken in connection with the bases and whaleback ridges which stud the surrounding country present all the features of an up-raised archipelago, and lead to the belief that at no very remote geological period the sea of the western portion of the Bay of Bengal dashed against many a rugged cliff and rolled around clusters of islands which studded over what is now the Province of Cuttack; indeed, a comparatively trifling depression of the country might reproduce the same phenomena. Upon entering the hills they are seen to consist not

(*) Includes the pargana of Kanika, tanks numbers 1853 and 1853, with a revenue of Rs. 22.

(†) Includes a part of Kanika, situated in Balasore.

(‡) See paragraph 810.

§ A fuller description of the geological formation may be found in Section 3 of Mr. N. N. Banerjee's report on the Agriculture of Cuttack.

of long continuous ranges, but generally of insulated and rugged ridges seldom more than 10 to 15 miles length and having one uniform direction nearly due east and west, parallel with the lamination of the gneiss and with the main faults of the District. This is better seen near the coast than inland. As to the west of Ungul, the hill ridges, though preserving the same general direction are longer than near Cuttack."

"The hills as well as the low country are for the most part well-wooded and present few naked bluffs (even amongst the almost precipitous sandstone escarpments of the Talcheer field). Their outline, however abrupt, is always more or less rounded, and it is evident that they owe their present form principally to marine action."

"Wherever the sandstone of the sedimentary deposits rise into hills it presents a totally different aspect; these hills, though generally appearing flat-topped, being found on ascending them to consist of a series of sharp steep ridges separated by deep precipitous valleys, evidently due to the denuding action of fresh water, of the effects of which upon a considerable scale they afford a fine example."

"Laterite has but little extension in Orissa; it occurs to some extent round Cuttack, and frequently borders the hills between that station and Balasore, besides occurring in small patches upon the plains."

"The alluvium of the District contains, so far as observed, no fossils, and having been investigated over a comparatively small area, it is impossible to specify its age. The surface is probably a fresh water accumulation, since during the rains the greater portion of it is subjected to inundations from the numerous rivers flowing through the district; but to what depth this character extends, and whether at greater depths any change takes place in its mineral character and composition, are points remaining for future investigation."

21. Through gorges in the mountain system of the Tributary Estates flow three large rivers* the Mahanadi, the Brahmini, and the Baitarni, and the greatest of these is the Mahanadi.

Rivers.

(1) The Mahanadi, literally "the great river," has a catchment basin of 48,200 square miles, and flowing down through the Barmul Pass debouches into the plains just above

The Mahanadi.

Naraj, some 7 miles above Cuttack and 70 from the sea; at Naraj it bifurcates, the northern branch being known as the Mahanadi and the other as the Katjuri†. The latter appears originally to have been a comparatively small stream, but during the present century the volume of water passing down its channel increased very considerably, and to regulate the flow, a weir and a training embankment were constructed at Naraj between the years 1860 and 1865; but in spite of this measure, the volumes of water passing down the Katjuri and the Mahanadi channels in the high flood of 1872 were found to be almost exactly the same, whereas in 1855 the ratio of the discharge of the two rivers was, according to Mr. Rhind's calculations, as 8 to 10.

Opposite Cuttack the Katjuri throws off to the south a branch called the Kawakhai (or the crow's pool). Its mouth is closed by a bar, so that there is no flow of water in it save in flood time. It supplies the district of Puri and has but little effect on Cuttack.

The main stream of the Katjuri gives off a little below Cuttack another branch, the Sirua, which however rejoins it 5 miles lower down. The river then divides again, forming the Sankharisahi island; the main body of water passing down the Deb

The Katjuri.

and afterwards by the Kundal channel through parganas Sailo, Deogaon and Kâte, while the Deb and Tampua, taking a more northerly course, rejoin the Kundal near the Binishpur Hât. The two most northerly branches the Katjuri proper and the Alanka, have been cut off at their head by the Deb left embankment, and the water originally carried by them has been diverted into the Deb and Tampua.

To return to the Mahanadi. This stream passes to the north of Cuttack, and opposite the town gives off a branch called the Birupa.

Just below the bifurcation both rivers are dammed by anicuts which control the supply of water to the head sluices of the High Level and Kendrapara Canals. The

The Birupa.

Birupa about 12 miles farther down throws off a branch called the Bara Ganguti, the two streams enclosing between them the island of Kuhunda Jaipur.

About 18 miles below this bifurcation the Ganguti meets the Kimiria a branch of the Brahmini, and a mile lower down rejoins its parent stream.

* See Map No. III.

† Implying that it could at one time be crossed on a plank: 'kat'-long and 'juri'-joining.

The Birupa, thus increased in volume, meets the main stream of the Brahmini a little above Indipur, and the two flow on together, being joined lower down by the Kharsua, and finally debouching into the Dhamra.

The Mahanadi proper, after passing Cuttack, divides into three branches—to the north the Chitratola, in the centre the Mahanadi, and to the south the Paika. Ten miles further down, the Mahanadi and Paika rejoin, only to separate again into the Sukpaika and Mahanadi, which meet and pass into the sea near False Point through a number of channels.

The Chitratola throws off one branch, the Nuna, which eventually rejoins it, and the two flow into the Mahanadi, and so down to the sea.

The Brahmini has a catchment basin of 13,700 square miles and enters the plains of Orissa near Janapur, where it throws off a branch called the Kharsua which again divides into the Kharsua and the Patia.

The main stream is crossed by an anicut at Janapur, and a little below this gives off the Kimiria river which falls into the Ganguti, and their united waters again join the Brahmini above Indipur.

The head of the Kharsua is dammed by a cross embankment, and there is an anicut across the Patia at Jakadia to keep a supply of water for the second range of the High Level Canal. The two channels unite a little lower down, and the river flowing through parganas Tisania, Beruan, Kalamatia, and Hatimunda falls into the Dhamra.

The Baitarni, with a catchment basin of 3,900 square miles, forms the boundary between the Cuttack and Balasore Districts, and, passing by Chandhali, falls into the Dhamra. At Jakadia it throws off a branch, the Burn, which joins the Kharsua near Beruan.

All these rivers have broad, shallow, sandy beds, very little below the level of the surrounding country. They have but a very gradual fall, that in the Mahanadi and Baitarni varying from about 2 feet per mile, where they enter the plains, to 9 inches at tidal water. That of the Brahmini is still less and does not exceed 14 inches per mile anywhere in the plains.

In the hot weather they are nearly dry, the minimum recorded discharge being 70 cubic feet per second in the Baitarni, 129 cubic feet per second in the Brahmini, and 400 cubic feet per second in the Mahanadi.

In flood time, on the other hand, the channels are not sufficient to carry off the whole discharge, which amounts to a maximum of about 1,600,000 cubic feet per second in the Mahanadi, the average of the rainy season being about a third of this amount. In the Brahmini the maximum flood discharge is about 600,000 cubic feet per second and in the Baitarni 315,000 cubic feet.

From June to October floods are of common occurrence in all three rivers. The source of the Baitarni supply being local, it both rises and falls more rapidly than the other two, the floods in it rarely lasting above three days. Floods in the Brahmini commonly last three to five days, and do, on the whole, more damage than those of the other rivers. The Mahanadi takes longest to rise and remains longer in flood than the others.

22. For its protection from inundation a portion of the District has from time immemorial been guarded by embankments, and under British rule this protection has been systematised, and large sums have been expended on the perfecting of the embankments, especially after the disastrous floods and famines of 1865-66. The law as to the Orissa Embankments is contained in Act III of 1855.

So much has been written by experts on the subject of protection in Orissa that it would be out of place to attempt in a Settlement Report to give a detailed account of the constructing, condition, and effect of each and every embankment; but I propose to describe briefly the protected and unprotected areas, and then to place on record the conclusions drawn from my observations as to the condition of the several parganas according as they are more or less exposed to flood. The map, No. I, will show the areas liable to flood, and the embankments are shown in map No. III. For a more detailed account,

I would beg to refer to Captain Harris' report on the Orissa inundations, 1858; the report on the inundation of 1866; Mr. Taylor's report of 1870 on the Orissa embankments; the reports on the floods of 1882 and 1896; to Mr. Inglis' report now in course of preparation; and to the pargana reports prepared in this Settlement.

Under the Mahratta Government the zamindars were bound to maintain embankments, and for this purpose were allowed certain deductions from their *jama*. This system

Historical sketch. had, however, proved so unsuccessful in Orissa, that from the time of the conquest the British Government undertook itself the maintenance and repair of the embankments, and very large sums were expended for the purpose; but there was no attempt to systematise, and down to 1855 it does not appear that more had been done by the Public Works engineers than to maintain and improve the existing embankments. In that year very destructive floods occurred, and Captain Harris, after an elaborate enquiry, pointed to the remarkable coincidence between the rise in the destructive power of the floods since 1831 and the development of the embankment system during the same period, and expressed his opinion that they must be related as cause and effect. In the following years great changes were caused by the protective works in connection with the canals, and it was not until after the disastrous floods of 1866-67 that steps were taken to remodel the system.

In that year the late Mr. W. C. Taylor was deputed to make an accurate record of all existing Government and zamindari embankments, and of the extent to which Government and the zamindars were respectively bound to maintain them. He reported that there were about 510½ miles of Government embankments and 248 miles of the zamindari embankments in Cuttack District, that most of the latter had been as originally constructed of insufficient height and section to withstand heavy floods, and that they were now in disrepair and useless. He considered that another 408 miles were required to complete the system, but that, by regulating some of the rivers and closing others entirely, many of the bunds and sluices proposed in the report could be dispensed with and some of the existing embankments abandoned. His proposals were never given effect to.

In 1881 it was decided that, for the time being, the embankments should be maintained as they were until the expiry of the settlement proceedings.

In 1894 Mr. C. W. Odling, the Chief Engineer of the Irrigation Department, prepared a complete list of embankments to be maintained and abandoned. He divided them all into the following five classes:—

Class I.—Embankments mostly constructed in connection with the canals which are intended to be kept intact against high or extraordinary floods.

Class II.—Embankments, chiefly on large rivers, which are mostly above high flood level, and which it will probably be desirable to maintain permanently at their present height.

Class III.—Embankments which it will probably be eventually desirable to abandon, but which it is proposed to retain until the full effects of abandoning the embankments shown in Classes IV and V are known.

Class IV.—The embankments in this class are maintained simply because they were in the charge of Government in December 1881, and not because they are supposed to be of any real use to the country. In some cases there is no doubt they are actually harmful, though they may afford some partial protection to particular places, and in all their utility is questionable.

Class V.—The embankments in this class have already been practically abandoned, as the country they were supposed to protect is now covered by embankments included in Class I.

The total length of embankments in Orissa is 969 miles, of which it was proposed at the commencement of the new settlement to abandon 372 and to retain 597 miles. Of the 597 miles retained, 141 miles are shown in Class III. These Mr. Odling proposed to abandon gradually after careful enquiries in each case. There would thus remain 456 miles of embankment, which it will

probably be possible to maintain in an efficient condition. It was not, in Mr. Odling's opinion, likely that it would be necessary for thirty years at least to abandon any embankment included in Class I or II, but there might be alterations in the rivers which would render it necessary to do so.

In Cuttack alone the embankments* to be maintained measured—

	Miles.
Class I	158
Class II	139
Class III	35

Another 50 miles under Class IV have also up to date been maintained, making a total of 382 miles against the 510 found by Mr. Taylor. This would give as abandoned 128 miles against 179 according to Mr. Odling's list, the reason for the difference being that many embankments shown as zamindari by Mr. Taylor were actually on the Government list. I understand that Mr. Odling's list has been considerably altered in consequence of the enquiries made in the years 1896-99.

The expenditure on embankments has been very large.

From 1803 to 1830 the total expenditure in the Province was Rs. 8,09,986, of which half may be debited to Cuttack.

From 1830 to 1866 Rs. 7,66,777 was spent in Cuttack alone. Since then the expenditure has been as follows:—

	Rs.
First ten years	8,83,675
Second ten years	4,88,133
Third ten years	5,39,000

These latter figures include a small expenditure on account of embankments in Balasore, and exclude an estimated expenditure of Rs. 1,50,000 in Puri from 1895 to 1897-98.

The average annual expenditure has been at different times:—

For—	Rs.	For—	Rs.
1803—30	17,308	1860—66	59,247
1831—45	10,794	1867—76	88,357
1846—52	13,700	1877—86	48,813
1853—59	40,807	1887—96	53,900

The saving since 1876 may be attributed in part to the policy of abandonment of all superfluous embankments, and in part also to the large capital expenditure in the preceding decade on the canal embankments which to a great extent supplanted the existing protective works.

I now proceed to consider the embankments in detail, beginning with those on the south of the district. The numbers quoted refer to Mr. Odling's schedule printed as Appendix G.

23. The Katjuri begins at Naraj and in spite of the anicut, which is built at an angle so as to divert the main body of the stream down the Mahanadi, its channel hardly suffices to carry off all the water it receives in high floods.

Embankments of the Katjuri and its branches

The first of its branches, the *Barang Nala*, has been closed by an embankment (No. 152) at its head, but this has in former years been breached and much damage has been done by deposits of sand, chiefly in the *lakhiraj* estate of Patia. Lower down, the right banks of the Katjuri and Kawakhai are unprotected, and the water spills over the fields of a few villages of Bakhrabad and is steadily encroaching on the land, while the head of the Kawakhai is still widening.

The country between the Katjuri and Kawakhai rivers is protected by embankments maintained above high flood level (Katjuri right No. 153 and Sirua right No. 188). I am very doubtful whether this protection has proved beneficial; for there has been little or no increase in the rental and a general falling off in rent rates since the last Settlement, which the people attribute to the more valuable crops grown when there was a regular overflow from

* See Appendix G.

the Teljuri river now closed. I find that this part of the embankment was constructed in 1867-68, the floods of 1866 having proved very destructive; the crops now grown appear to be inferior to those of 1842.

In continuation of this for some 8 miles the right bank of the Deb is protected by embankments of which a portion (Nos. 162 to 168) belongs to Government, but the most is maintained by the zamindars, a cess being collected from the tenants for the purpose. The result is that practically the whole of Sailo pargana is protected from the direct rush of water, but the lower end is still covered by the backing up of the floods from below. This embankment was badly breached about thirty years ago and the people of the riparian villages in Bakhrabad and Kodinda still complain of the damage caused by the deposits of sand.

The left bank of the Katjuri is continuously protected by embankments Nos. 90 to 119, and below that by the Machgaon Canal and the Deb left embankments. These embankments were in former years badly breached and much damage was thereby caused. They are now maintained above high flood level as part of the Taldanda-Machgaon irrigation system, and with the Mahanadi right embankments and the Taldanda Canal protect from all floods part of parganas Kodinda, and the rich tracts of Hariharpur, Jhankar, Kurania, Gandito, and most of Tiran, Khandi, and Benahar; about 200 square miles.

Between the Katjuri and the Sirua lies an island partly protected by the Katjuri right and Sirua left embankments, Nos. 188M.A. or 154 to 161.

Kodinda Islands.

These embankments are in bad order, and should, in my opinion, be maintained continuously from Kalpara to Berhampur and from Berhampur to Sarchuan; the lower end of the island will not suffer by being left open, but the rush of water through the gaps and frequent breaches in Govindpur and other villages have caused, and will continue to cause, very serious loss of crops and deterioration of soil unless the embankment is made continuous and kept in repair.

Sankharisahi island, comprising the western half of pargana Saibir, lies between the Deb, the Katjuri, and the Biluakhai and is exposed to their floods, the old embankments having been abandoned.

Sankharisahi Island.

I would not recommend the reconstruction of these embankments, but the breaches in the river bank require to be repaired. Much of the land in the island is very rich and, save where there is an exceptionally strong rush of water through a *ghai* or breach, the benefits of the silt deposit appear to counterbalance the risk of loss of the rice crop by flood.

The Deb left embankment No. 261A., starting from Balia closes the channels of the Alanka and Katjuri and diverts the water down the Biluakhai, along the left bank of which it runs to its junction with the Deb. From there another embankment, No. 261, follows the course of the river down to the end of pargana Káte, where the Kandal joins it to form the Debi river.

Deb Left Embankment.

These embankments protect from flood that part of parganas Saibir, Deogaon, Káte, and Gandito which lies between the Alanka and Deb rivers, and canal water is now available for irrigation in most villages of this tract, some 50 square miles. There is no doubt that this tract has been greatly benefited, probably at the expense of the villages on the opposite side of the river; I do not, however, consider that it requires irrigation beyond the already existing system of irrigation from tanks and streams.

The branches of the Deb are so numerous and perplexing that I shall not attempt any detailed account of them.

The branches of the Deb.

The most important of them, indeed of all branches of the Katjuri, is the Kandal river which, starting in pargana Sailo, flows southward through Deogaon and Káte, where under the name of the Taunla it again meets the Deb. The left bank is throughout Deogaon unembanked, and the water overflows the whole country but does not generally do much harm. To the right a zamindari *bund* partially protects the

The Kandal.

villages of pargana Sailo, and lower down there is a Government embankment of the fourth class (Nos. 266 to 283, in Mr. Odling's list) from Anlo to Baharana in pargana Deogaon. It is in very bad order and though, if properly maintained, a valuable protection to a limited number of villages, is, in its present state, productive of more harm than good.

The only other embankment of importance on the Kandal are Nos. 265 and 250, protecting a large area in Kâte between the Taunla and the Debi. I have no doubt but that these should be maintained, as the direct rush of water from the Kandal would probably cover the whole of this tract with sand.

Between the Kandal and the Deb left embankment the whole country is a net-work of streams—the Goda, the Biluakhai, the Dahikhai, and many others. Formerly these were all more or less embanked, but the policy of Government has, of late years, been to sacrifice these small *bunds* to the maintenance of the big irrigation embankments intact. Most of the embankments have been abandoned, and only here and there remains one that protects a village site or, for some other reason, has been kept up by the zamindars.

From what I have seen of the country I do not think it would be much, if at all, benefited by the embanking of all the streams, but embankments which keep off the direct rush of the current or protect village sites should, I think, be preserved, and I particularly recommend the following:—

- (1) Embankment in Sasanpada, pargana Deogaon, between the Tampua and Deb rivers now abandoned and badly breached, Nos. 225 to 227 in Mr. Odling's list.
- (2) Embankment protecting mauzas Balada and Rahamba, in pargana Saibir, from the Deb, No. 260 in Mr. Odling's list.
- (3) Gardhua left, No. 257.

In other places embankments are required to close, or sluices to control, the *ghais* or spill channels formed by the floods, as in Palaudha in pargana Deogaon. The zamindars have in parts constructed embankments for such purposes, but they are generally inefficient, and I do not think the Public Works Department would find the cost of keeping the river banks in order prohibitive if they did not attempt to raise the banks above the general level of the country.

It is said that the greater volume of water now passing down the Katjuri, together with the contracting of the waterway due to the closing of the Alanka and Katjuri channels, has caused the loss of crops to be more frequent than it was at the last Settlement. I have myself seen ample evidence of the serious damage done by the deposits of sand, but the *ruinads** show that inundation was the rule in most of these parganas before 1840 and the country is now said to be gradually rising owing to the annual deposits left by the rivers.

The numerous channels, too, afford facilities for irrigation which the people avail themselves of freely for the growing of valuable *rabi* crops; and uncertain though the harvest be, it is, in favourable seasons, most abundant.

24. Above Cuttack the left bank was formerly partly protected by embankments. The river has, however, so far encroached on the land that in places the embankment has now disappeared and the water pours over the villages of Panikhand and Atgarh, which are also inundated by a spill from the Saparna a tributary of the Mahanadi. Lower down also the villages of Cuttack Haveli and some of those of Tapankhand are heavily inundated, but the total area affected is small and much of the land very inferior; so that I am not sure that to put the embankments in good order would be financially justifiable, though in 1870 Mr. Taylor recommended that the embankments should be made continuous down to Chasapara and the *nalas* sluiced.

Mahanadi Right—(a) Cuttack Town.

Cuttack town is protected by a high revetted embankment said to have been originally constructed by Markat Keshari in A.D. 1006.

Below this the right bank of the Mahanadi and Sukpaika rivers is continuously embanked (Nos. 47 to 55 and Nos. 69 to 86) to Jaipur, and from there to Taldanda the

(b) Taldanda system.

the country is protected by the canal. Between this line of embankments and the Machgaon Canal there lies about 200 square miles of country protected from flood and generally within reach of irrigation.

The embankments have been completely remodelled in recent years, but in 1870 Mr. Taylor reported that the embankments below Jaipur are very ancient, and that the old Raj bund was far superior to the Government embankment. It is interesting to notice his conclusion that in former years the floods in the Mahanadi ranged higher than those of which we have any record. This fact may be set off against the increasing currents of the Katjuri floods.

The left bank of the Mahanadi from Cuttack to Marsaghai follows the Kendrapara canal to the north of which the country is protected from all floods. Between the Kendrapara and Taldanda canals is a long strip of country more or less exposed to the floods of the Mahanadi and its branches and including parganas Paenda, Suhang, Kusmandal, Suknai, Balubisi, Abartak, Anabartak and Paena.

Mahanadi Left—(c) Kendrapara System.

The Sukpaika leaves the Mahanadi at Aitpur, pargana Kodinda, rejoining it at Arang in pargana Balubisi 18 miles lower down. In the island thus enclosed lie portions of parganas Paenda and Balubisi. They suffer a good deal from floods, though partly protected by embankments. Mr. Taylor recommended the closing of this channel, but I would rather recommend the strengthening of the embankments at the western end of the island, Nos. 56, 72, and 73.

(d) Sukpaika.

The western end of the triangle lying between the Mahanadi and Chitratola and containing portions of parganas Paenda and Suhang suffers a great deal from the frequent loss of crops; it is almost unprotected, but I do not think that much can be done to better it. Lower down, the country between the Nuna and Chitratola rivers containing portions of the parganas Suhang, Kusmandal, Suknai, Balubisi, and Paena, is one of the richest and most highly assessed in the District. It is protected by second class embankments numbered 43 to 45 and 46 to 61, and by a third class embankment Nos. 62 and 63 and some fourth and fifth class embankments, so that the water only overflows in high floods. It suffered very badly in 1896, but the embankment at the upper end of the island is now in good repair and is not likely to be breached. The lower eastern end of the island, containing portions of parganas Suknai, Balubisi, and Paena, is open to the floods of the Nuna, which have been aggravated by the construction of the Kendrapara Canal.

(e) Chitratola and Nuna.

This part of the country grows comparatively little paddy, the people depending almost entirely on the *rabi* crops *kultha*, *birhi*, castor, *arhar*, &c.

I believe that some of the flood channels in this part might be canalised, and would be of great value for winter irrigation.

Between the Chitratola and the Sukpaika is a strip of land containing the greater part of pargana Balubisi and portions of Paena and Abartak. It is protected from floods by second class embankments bearing Nos. 7 to 14 and 17 to 28, but they are not continuous, and in the flood time the rivers overflow their high banks with, on the whole, a most beneficial effect. Splendid crops are reaped in these parts and rent are almost the highest in the Province.

(f) The Sukpaika.

The island between the Paika and Mahanadi containing lands of Balubisi, Barpala, and Abartak is similar to the last, being partially protected by embankments of the second class Nos. 1, 2 and 3 and by the fourth class embankments Nos. 25 to 46. I cannot estimate the effect of abandoning the latter, but the country is now so prosperous that I would not advocate any change.

North again from this area the whole tract between the Kendrapara and Patamundai Canal, containing the greater part of parganas Saraswati, Karimal, Padampur, Sangra, Matkatnagar, Asureswar, Derabisi, Nahakhand. Tikan, Chhedra, and Utikan is protected from floods by canal embankments.

The Kendrapara-Patamundai Canal System.

The total area so protected is about 300 square miles; it is drained by the old Gobri river and by artificial channels. The drainage is not considered by the people satisfactory, and I have heard many complaints, especially against the Patuali in Matkatnagar which is said to need sluices to prevent the water escaping too freely.

In a few villages the floods of the Gobri still do a little harm, but not much.

25. The next tract we come to is the basin of the Birupa. The right bank of this river is continuously embanked from its source to Patamundai, 50 miles below. On the left, again, hills and first class embankments.

(Nos. 110 to 113) line the channel as far as pargana Keruakhand, and from there protect the left bank of the Ganguti down to pargana Dihi Arakhpur, cutting off at its source the Chota Ganguti. In between the right and left embankments lie parganas Kuhunda Jaipur, Dihi-Arakhpur, and Western Alti. All over these the water flows deeply in floods of any extent and its escape being checked by the hills of Manduka and Osia, lies long enough to drown all the crops. Kuhunda Jaipur suffers most, more indeed than almost any pargana in the District. There are but a few remains of old *bunds* in this area, and I understand that it is out of the question to construct more.

Speaking with all deference as a layman I do not quite see why something should not be done; for Mr. Taylor, in his report on the Orissa Embankments in 1872, proposed to cut off the Ganguti at its head, and thus force the whole stream down the channel of the Birupa and through the narrow gorgo between the Manduka hill and the right embankment. It is also apparent that the damage done is not due to the insufficiency of the channels so much as to the banking up of the waters on meeting the flood of the Brahmini and the hills of Alti. As all the stream has eventually to pass through the channels left by the hills I do not see why the triangular block formed by Kuhunda Jaipur, with its apex at Nandakisharpur and its base in the Manduka and Osia hills, should not be completely protected. Financially, I presume, it would not pay, but it would be a boon to the people.

Between the left bank of the Birupa and the high lands on the west of the District the country is irrigated from the High Level Canal, and is protected from all serious floods.

26. From Indulva in killa Balarampur where the Brahmini enters the plains to Kotpur in pargana Alti, the right bank of the Brahmini and its branch the Kimiria is lined by the High Level Canal and the first class, embankments numbered 107, 109, and 116. The low lands of killas Balarampur and Madhupur and the north-western corner of Alti are thereby protected, and are to some extent irrigated from the High Level Canal.

Below this there are no embankments on the right of the Kimiria, and its waters joining those of the Ganguti and banked up against the hills inundate the central portion of Alti pargana. Loss of crops is frequent, the water sometimes standing for days at a depth of several feet, but I have seen only a few traces of sand deposits in this area, and the silt enables fair *rabi* crops to be grown.

Between the Brahmini and the Kimiria lie portions of parganas Alti, Bargaon, and Beruan. In this area are some Government embankments of the third and fourth class bearing Nos. 247 to 261. They are not continuous, but with the aid of a few zamindari lands, protect the villages of Alti and Beruan from serious damage. In Bargaon loss of crops is more common, but good *rabi* is obtained.

It has been estimated that the loss of revenue consequent on the abandonment of these embankments would be Rs. 1,000.

To the east of pargana Bargaon the Brahmini flowing down the Sankara channel joins the Kelua, as the united Birupa and Kimiria are called, and under the name of the Brahmini falls into the Dhamra below Chandbali. As far as Alti the Patamundai Canal protects all the country on the right bank, and cuts off at its head the Chhota Brahmini channel. In the island enclosed by the Brahmini and Chhota Brahmini rivers lies the pargana of Utikan formerly surrounded by protective embankments, but the supply of water in the Chhota Brahmini has been so much diminished that those on the south side have been abandoned and only the second class embankment No. 100 along the Bara Brahmini is to be maintained. The water, however, backs up in the Chhota Brahmini, and being salt, the result of even a small overflow is injurious. The only remedy that I see is by a system of sluices on the Chhota Brahmini to inundate the country with

fresh water in flood time. This would be beneficial to the riparian lands in both Tikan and Utikan.

This disposes of the right bank of the Brahmini so far as it concerns the areas under settlement, and we must now return to Janapur where the Kharsua and Patia branch off to the left.

Brahmini Left.

The head of the former has been dammed by the embankment connecting to Brahmini-Patia anicuts, and it now forms a spill channel for the waters of the Janardhan and other *ghais* down to its junction with the Patia where the combined stream takes the name of Kharsua.

Between the Brahmini and the Patia lies one of the most heavily inundated tracts in the district, comprising parganas Olas, Beruan, Kalamatia, and Hatimunda. For some distance below the Janapur anicut the left bank of the Brahmini is unembanked; for the most part it is high and sandy, but there are some bad breaches in it, through which the flood-water spills over the country. The most notorious of these is the Janardhan *ghai* which, starting a few miles below the anicut, flows through Olas and eventually falls into the Dudhai, a branch of the Kharsua in pargana Boruan.

This is an old channel, and I understand that it is out of the question to close its intakes, but there can be no doubt but that it has done great harm and will continue to do so in years of exceptional floods. The attempt of the Madhupur estate to protect some of their villages by a circular embankment at Gopalpatna proved disastrous, for when the *bund* gave way in 1896 the whole country suffered to an exceptional degree by the sudden rush of water.

A little above Dharmsala, the country is protected by embankments of classes I, II, and IV, Nos. 240 and 241, extending for a distance of about 5 miles. I am not sure that these embankments are of much value, as the country they protect is annually inundated by water from the *ghais* higher up. Below this, the left bank of the Brahmini is open, except for a couple of miles in the west of Kalamatia, where the Dudhai *nala* is embanked by the third class embankments Nos. 242 to 244, and again between Kalamatia and Andara villages, where the country is protected by embankments, Nos. 245 and 246. In floods of any height the river overflows its banks, but I have not found that much harm is thereby caused, and I would not recommend the construction of any more embankments. The existing embankments I consider to be useful in so far as they prevent the formation of *ghais*, which always do a lot of harm.

Except for the short canal embankment closing the head of the Kharsua, the Patia river is practically open for the whole of its length, and I have not the knowledge on which

Patia Right.

to form an opinion as to the utility of the few fourth class embankments on its right. Generally it may be said that the most singular characteristic of this river is the great number of spill channels formed by it, of which I may enumerate the Dudhai *nala*, the Similia *ghai*, the Santi *ghai*, the Raipur *ghai*, the Kani *nadi*.

These *ghais* when first formed are every destructive, running in shallow channels, scouring out the fields and depositing sand. Later on, they usually cut channels deep enough to carry off the water and only do serious damage in exceptional years. When they reach this stage they should be provided with sluices and canalised, as is being done with the Dudhai; but breaches newly formed should, I think, be at once closed.

Of the several parganas between the Brahmini and the Patia, it is Olas and Upper Beruan, where the *ghais* take their start, which suffer most from floods and sand deposits. Lower down the water gets more spread out, and the *rabi* and *dalua* crops go far to compensate the *raiya*s for the occasional loss of the *sarad* rice.

Above Jakadia the Brahmini and Patia spill over their banks into a saucer-like plain known as the Sukinda *Pât*. The inundation is beneficial and the flood-water is kept

Patia Left.

in by an embankment maintained, I believe, by the estate.

Below Jakadia the Shergarha villages are high and the river basin is bounded on the north-west by the High Level Canal. For the protection of pargana Jodh between the High Level Canal and the Kharsua, a few second class embankments, Nos. 173 to 175, have been constructed, but they do not

serve for much more than to preserve the village sites. The pargana suffers much from erosion of the soil and frequent loss of crops, but as the people are unwilling to accept the offers of the Public Works Department to canalise the Baidi Nala Sahi and supply water for *dalua*, they are probably not so badly off as they allege, and rents are highest in the flooded portions of the pargana.

Further down, parganas Tisania and Dolgram are protected by the Bara Kharsua left embankment, class I, No. 178, and

there can be no doubt that the country to the north has greatly benefited by its construction; but, on the other hand, the people allege, and the local officers support their contention, that this embankment has aggravated the floods in Southern Tisania, in Berau, and Kalamatia, and is the cause of the breaches that have done so much harm.

Below Binjharpur again there are second class embankments, Nos. 186, 187, 189, 191, 192, 195, 211, 213, 214, 215. These have been breached in many places, but with the exception of the Bachol *ghai*, none of the breaches are alleged to cause more harm than good. In Dolgram the riparian villages are high, and the lowlands grow *dalua*; in Bára the soil is saliferous, and requires to be thoroughly washed out by the froshets, and the opinion of the officers on the spot was that the breaches should be left open or the embankments abandoned below Singhpur, if not below Binjharpur. The question of the maintenance of that lower portion of the Kharsua left embankment is a difficult one. The floods undoubtedly do much harm to the lowlands in Ahyas, Bautara, and North Dolgram, especially since the waterway has been closed by the Baitarni embankments, but, on the other hand, many villages benefit largely by the silt deposits, and there is some fear of the country suffering if the salt is not annually washed out.

27. The right bank of the Baitarni is embanked above Roria to a distance of 7 miles, and above this the country in pargana Shergarha is so high as to be but little liable to inundation.

Embankments of the Baitarni and its branches.

At Roria the Baitarni bifurcates, the southern branch, the Bura, joining the Kharsua in pargana Berau, while the main stream joins the boundary of the Cuttack and Balasore districts.

On the right the Bura floods pargana Jodh, doing some harm; but I understand that this is inevitable, and rents do not appear to have been much lowered in consequence.

Bura River.

On the left the Bura is embanked continuously with the Kharsua as part of the Jajpur Canal irrigation scheme. The embankment has proved of great benefit to the country

Bura Left.

protected, but it is said, and I think with justice, to have aggravated the floods on the right bank. The balance of profit and loss it would be difficult to strike, but the general opinion of the Assistant Settlement Officers is that the country as a whole has benefited.

Since 1893 the Baitarni has been continuously embanked on the right down to pargana Ahyas, and the whole tract between the Bura, Kharsua, and this embankment,

Baitarni Right.

embracing most of parganas Jajpur, Dolgram, and Tisania, part of Ahyas, protected from flood. Formerly the embankments were low and frequently breached; now they are above high flood level and secure. Below Ahyas the banks are high and partly embanked, but in high floods the river overflows them and this part of the country is also inundated through the breaches in the Kharsua embankment.

I am not here concerned with the effect of this embankment on the floods in Balasore, but in Cuttack also the people complain:

- (1) That the embankment has cut off at their head the Benga and other streams which used to supply water for irrigation.
- (2) That it prevents the escape of the accumulated rain water and of the water from the Kharsua.

As to the former of these objections much of the land may now be irrigated from canals, and I understand that the Public Works Department are canalising the closed channels so that they may be used for *dalua* and *rabi* irrigation. As to the second objection, it has not been shown that the drainage

is seriously obstructed, and the local officers report that it is only in the very low lands that the water lies deep. Mr. Carey writes: "I think that there can be no question that the benefits of the protection far outweigh its disadvantages, but I would strongly suggest that the attention of the Irrigation Department should be drawn to the value of canalising streams that have been cut off."

28. Having now given a short account of the extent to which the principal rivers in the temporarily-settled area are embanked, I propose to pass on to the question of irrigation. In the figures quoted I include those of the High Level Canal, Range III, in Balasore.

Irrigation.

History of Irrigation.

While the embankments have existed from the earliest times, canals are of but recent construction in Orissa, and owe their origin to the private enterprise of the East India Irrigation Company. This company started with a most ambitious scheme for a system of canals for navigation and irrigation extending from Calcutta to Puri.

The works were begun in the early sixties and were but partly completed in 1867-68, when the Company being unable to carry it on any longer, Government took over from them at a valuation, and completed the scheme with very great modifications.

The works sanctioned included the Taldanda and Machgaon Canals for the irrigation of the lands between the Mahanadi and Katjuri rivers; the Kendrapara and Patamundai Canals for the irrigation of the area between the Chitratola and the Berupa, and three ranges of the High Level Canal for the irrigation of the strip of country lying at the foot of the hills from Cuttack to Bhadrak.

By 1874 the greater part of this modified scheme was complete, but the collections proved very disappointing, and in 1884 a revised scheme was approved for the extension of the Taldanda and Machgaon Canals and the construction of new distributaries, bringing the total estimate up to Rs. 3,23,00,000, of which Rs. 2,02,00,000 had already been expended.

The scheme then approved has been completed with the addition of 5 miles of the Machgaon Extension Canal beyond the village of Nagpur; and one additional canal, with a total length of 7 miles, from Jajpur to the junction of the Baitarni and Bura was completed in 1895. The total expenditure up to the end of the year 1897-98 was Rs. 2,63,02,141, and to show for this there are seven weirs across river channels with an aggregate length of $3\frac{1}{2}$ miles, which constitute, with canal head sluices and entrance locks, the most extensive head works of any canal system in India. There are 205 miles of canal available both for irrigation and navigation, and 75 miles of canal for irrigation only, besides nearly 1,100 miles of distributaries and village channels. The maximum discharge of the canals in 1895-96 was 6,058 cubic feet per second, and the area commanded was 5,71,000 acres; the area now shown as actually irrigable is about 4,01,000 acres, and the area leased for irrigation is 2,00,000 acres.

29. Beginning from the south of the district, we meet first with the Machgaon Canal which, leaving the Taldanda Canal at Fakirpara, 7 miles south of Cuttack, runs along the north bank of the Katjuri river, and of its branch the Alanka, for a distance of 32 miles. It stops short by 6 miles of Machgaon, the terminal station at first proposed, and there is not much probability of its further extension unless circumstances should render it desirable to make a new route from Cuttack to the sea *via* the Devi river. To do this it would be necessary to deepen the canal and provide it with locks, as it is not now navigable; and I apprehend that a branch railway line to Machgaon would be more likely to pay its way.

Machgaon Canal.

The canal has a discharge of 776 cubic feet* per second and commands about 97,000 acres, for 82,000 of which distributaries had been completed in 1897. It irrigates the portions of parganas Kodinda, Hariharpur and Karania south of the Hansua drainage channel; and distributaries have been recently made to command the portion of pargana Kâte east of the Deb river and part of pargana Benahar. In the latter there is room for a great extension of canal

* Figures in this and the following paragraphs are taken from the Irrigation Manual of 1897.

irrigation, but Káte is already well supplied with creeks and tanks, and it is not certain that canal water will be wanted.

30. The Taldanda canal takes off from the right bank of the Mahanadi at

Taldanda Canal.

Jobra, immediately above the anicut, and runs in a south-easterly direction to Fakirpara where it gives

off the Machgaon branch. Thence it skirts the southern bank of the Sukpaika river to Jaipur, and from Jaipur to Taldanda it follows the course of the Mahanadi river, forming also a protective embankment. It has a total length of 52 miles, is navigable by boats of a considerable size, and provides an alternative route from Cuttack to Chandbali *via* the Hansua creek.

It has a discharge of 1,342 cubic feet per second, of which about half is taken off by the Machgaon canal, and commands 75,000 acres lying in the north of parganas Kodinda, Hariharpur, Jhankar, Tiran, and Kandhi. The first three have always been more or less protected and were at the last Settlement fertile and highly assessed, but the last two were formerly very backward, being liable to inundation and inaccessible, and they have been most markedly improved.

31. The oldest and most important of the Orissa canals is the Kendra-

Kendrapara Canal.

para Canal which, taking off from the Birupa river at Jagatpur just above the anicut, skirts the

northern bank of the Mahanadi and its tributary the Nuna river for a distance of 39 miles. It irrigates the country between the Mahanadi and the Gobri drainage channel, its right bank forming at once a protective embankment and a thoroughfare for the people. The country it commands comprises some of the most highly assessed parganas of the district, such as Sungra, Matkatnagar and Derabisi; and the water is now, owing to the system of drainage, absolutely indispensable.

The discharge is 1,067 cubic feet per second. The area commanded is 1,08,000 acres and the 23 distributaries are capable of supplying water to 97,000 acres. Nearly all lands requiring irrigation from this canal are already under lease. It is provided throughout with locks, and is navigable to Marsaghai.

32. The Gobri Canal is a branch of the Kendrapara Canal. Taking off

Gobri Canal.

from the 32nd mile it runs 15 miles in an easterly direction to the Gundakia river. It is navigable

and forms part of the main route from Cuttack to Chandbali. The area irrigated lies chiefly in parganas Tikan, Derabisi, and Chhedra, a part of the country requiring much systematic drainage before the canal water can be extensively used. Its discharge is 373 cubic feet per second and the area commanded is 21,000 acres; but the distributaries completed can only irrigate 9,200 acres.

33. This canal is only 6 miles long and forms the connecting link

Gobri Extension.

between the terminus of the Gobri Canal on the Gandakia river and the Brahmini at Albha. It

derives its water supply partly from the Patamundai Canal and partly from rivers, and irrigates the pargana of Utikan.

The discharge is 648 cubic feet per second and the area commanded 32,000 acres; but distributaries have been constructed for only 7,600 acres, and this canal is more used for navigation than for irrigation.

34. This canal leaves the Kendrapara Canal just below the head works at

Patamundai Canal.

Jagatpur and skirts the southern bank of the Birupa river down to Indipur, where it begins to

turn southward, and falls into the Gobri Extension near Albha after a circuitous course of 47 miles.

It is provided only with weirs and is not therefore available for navigation, but it irrigates some of the richest rice-lands of the province in Sungra, Matkatnagar, and Chaudakulat, and its left bank protects a large tract from the floods of the Birupa and Brahmini rivers. In the lower reaches some of the lands are too low to need artificial irrigation, but higher up the country is well drained and most villages are under lease.

The discharge is 885 cubic feet per second and the area commanded is 51,000 acres; the distributaries are capable of irrigating nearly 44,000 acres.

35. This canal forms part of the original scheme for connecting Puri

High Level Canal.

with Calcutta by canal. Three ranges only have been completed. Range I, from the Birupa to the

Brahmini river, a distance of 33 miles; Range II, from the Brahmini to the Baitarni river, a distance of $12\frac{1}{2}$ miles; and Range III, from the Baitarni to Bhadrak in the Balasore district, a distance of 39 miles.

It is the most picturesque of all the canals of Orissa, skirting the very base of the wooded hills of Darpan and Balarampur. The traveller, by the launches that ply on it, looks eastwards over almost boundless rice plains whose level surface is broken only by a few hills that here and there rise steeply from the surrounding country, while to the west his eyes see nothing but range upon range of rugged hill and valley in endless confusion. As an irrigation canal it is not a success and the newly, constructed railway will detract much from its value as a navigation route.

The first range commands 49,000 acres, the whole being irrigable by the existing channels. Only a portion of this is, however, under lease, and in some parts the natural irrigation from hill streams is difficult to replace. The second range commands about 10,000 acres, but only a very small area is irrigated and its most likely use is for *dutua* irrigation through spill channels.

By the Balasore Range 57,500 acres are said to be commanded but the distributaries are only capable of irrigating 44,000 acres.

36. The Jajpur Canal, the youngest member of the Orissa System, starting from the fork of the Baitarni and Bura rivers, runs $6\frac{1}{2}$ miles in an easterly direction to Jajpur town, up to which it is navigable. It has a discharge of 700 cubic feet per second, and commands 70,000 acres. The area for which water could actually be given in 1896-97 was 37,000 acres.

The canal secures from drought the valuable lands between the Baitarni and Kharsua rivers, and has been a great boon to the low-lying villages, growing spring rice, which formerly were irrigated with brackish water from the creeks.

CHAPTER III.

PHYSICAL AND STATISTICAL ACCOUNT OF BALASORE.

[This chapter is taken *verbatim* from Mr. Kingsford's report on Balasore.]

37. Sir William Hunter, in the statistical account contained in the second volume of his History of Orissa, has given so complete a description of the district that very little need here be said regarding its physical aspects. I shall therefore pass rapidly over those physical conditions in which the lapse of thirty years has brought about little change, and deal more fully with such subjects as canals, population, villages, markets and ports, upon which supplementary information is now available.

The district consists of an alluvial tract lying along the coast of the Bay of Bengal, about 90 miles in length, and varying in width from 30 miles at the north-eastern extremity to 10 at the narrowest, or central, portion and 40 in the south. The district of Midnapore bounds the north-east, the wooded hills of the Tributary States of Mohurbhanj, Nilgiri and Keonjhar lie along the northern and western flank, and in the south the river Baitarni marks the boundary of Cuttack.

The following statement will show particulars of the area under settlement of rents:—

Area.		Acres.
Area of <i>Lakhiraj bahal</i> lands	...	1,09,000
Area of temporarily-settled estates	...	9,59,100
Area of Government lands	...	13,600
	Total	10,81,700
Deduct—lands of Balasore estates in Cuttack district		7,700
	Balance	10,74,000
Add—lands of Cuttack estates in Balasore district		20,900
Total area under settlement of rents in this district		10,94,900
		or 1,710 $\frac{1}{2}$ square miles.

The total area complied by villages amounts, however, to 10,95,800 acres, and the difference of 900 acres is due to the inclusion of a permanently-settled village in Nangleswar pargana.

Adding to the area above shown *viz.*, 10,95,800, the area of permanently settled estates, 1,21,400; and of the Wards' Estates of Kanika within this district, 1,11,900, we have a total area of 13,29,100 acres or 2,076½ square miles. (See also paragraphs 503 and 504).

Cuttack estates, to the number of 295, have an area of 20,900 acres, situated in this district, while 7,700 acres, belonging to Balasore estates, are situated in Cuttack.

The area of Government lands includes 3,424 acres recorded as under the Collectorate. These are beds of certain navigable rivers and other miscellaneous items. Under the Public Works Department are 6,349 acres, including canals, embankments, roads, and bungalows. The District Board holds 2,400, and Local Boards 498, acres. The area of the Bengal-Nagpur Railway north of the river Burabalong is 570 acres. South of the Burabalong, with the exception of some lands in the *ra Soro*, mutation was not made in favour of the railway, as the lands were not acquired till after final publication of the records. Smaller areas are held by the Municipality, Police, and other Departments.

38 I shall here note only the principal rivers of the district.

Northern rivers.

Proceeding from north to south, the first is the Subarnarekha, which rises in Chota Nagpur and pursues a winding course of some 60 miles in this district. It communicates with the Coast Canal at Jamkunda Lock, and is largely used by country boats from Calcutta. This river carried the earliest European trade in India to and from the ancient port of Pipili, originally occupied by the Portuguese and subsequently (in 1635) by the English and abandoned in the early part of the next century owing to the silting up of the river. It is tidal up to a point above the ferry of Kalikorpur, 15 miles from the mouth, and 25 miles further up its course is spanned by the railway bridge at Rajghat near the ferry on the Grand Trunk Road. The floods, which are frequent, penetrate to a greatest distance of 12 miles and to an average distance of 4 miles from either bank, and those most destructive during the latter half of the century occurred in the years 1868, 1883, 1888, and 1896.

The next river is the Haskura, a hill stream which rises in Mohurbhunj and, flowing across the Irish Bridge on the Grand Trunk Road, below Rajghat, passes south over the Basta-Baliapal Road to Tapabulang, where it communicates, through an inlet, with the Coast Canal.

This stream contains very little water during the hot season, but has been known to cause considerable damage in the rains, when it carries away a great portion of the Subarnarekha flood.

The river Sartha runs a parallel course a few miles to the south and, passing under the bridge on the Grand Trunk Road at Basta, runs into the sea at the mouth of the Panchpara. It is tidal up to the Coast Canal.

The Panchpara is formed by the confluence of several hill streams from Mohurbhunj, one of which is tidal so far as a spot to the north of Haldipada on the Grand Trunk Road, to which country boats can penetrate during the rains.

The Burabalong, on which Balasore town is situated, at a distance from the mouth of 7 miles as the crow flies, but 15 by river, runs a course of 35 miles through the district. The name signifies "the old twister," and bears reference to the winding nature of the course.

The river has silted considerably, a process which had commenced before last century, and there is a difficult bar at the mouth. The India General Steam Navigation Company, however, runs a weekly service of steamers between Calcutta and Balasore. The area commanded by the floods of the Burabalong is not extensive, and lies to the north and north-west of the town.

39. Passing over the Párá and Nembu rivers, the next of consequence is the Kánsbáns, which is formed by the confluence of a number of small hill streams.

Southern rivers.

Rising in the Tributary States from Ambohata, north-eastwards from a length of 20 miles, these drain a large area of country, and after heavy rainfall in the hills, rush down with great violence and in considerable volume. These

sudden floods sometimes cover a considerable area, but seldom do much damage as the water quickly subsides.

The Kánsbáns itself passes under the triple bridge in the Grand Trunk Road, below Soro, and is then joined by two confluent, eventually reaching the sea by two mouths, the lower of which is called the Gamai. Owing partially to the construction of the Coast Canal, the latter has rapidly silted up, and the passage to the sea is now almost closed.

On the Gamai, 3 miles from its mouth, is situated the old port of Churamon, once an important centre of the export trade in rice and salt, but now an insignificant village.

A great volume of the flood water of the Gamai runs south-westwards along the old Churamon, or Ricketts' Canal, into the Matai, which drains the country east of Bhadrak and has a course of 40 miles. This river attains considerable volume at Charbatia, where it is joined by the Coast Canal; it runs thence into the Dhamra, by which communication is made with the port of Chandbali. The Matai is tidal as far as Ruknadeipur, 8 miles east of Bhadrak, to which point it is navigated by numerous country boats which carry traffic to and from Chandbali.

The river Salandi, rising, as the name implies, in the *sal* forests of the Mohurbhunj hills, flows across the south of the district past the town of Bhadrak and into the Baitarni, a few miles above Chandbali. In the rains it is navigable along its entire course of 50 miles through the district. It brings down a considerable flood, which seldom causes damage. The Rebo, and its tributary, the Kapali, run a parallel course to the south, and, with the Ganguti, discharges into the Baitarni. Neither the Salandi nor the rivers subsequently noted carry any water in the hot season above their tidal reaches about the village of Kumpura, half-way between Bhadrak and Chandbali. Country boats ply between Kumpura and Chandbali at every season of the year.

40. The last river to be mentioned is the Baitarni, which forms the southern boundary of the district. Though this carries very little water in the hot season, it passes

The Baitarni.

an enormous volume in the rains. Down to Akhoyapada the left bank is protected by an embankment, but below this the whole countryside is exposed, while the embankment on the right or Cuttack side prevents discharge of the water in that direction. The flood travels inland to a greatest distance of 8, and an average distance of 4 miles, and in the rains the country from Dhamnagar to Chandbali is one expanse of water. Owing to this and other causes, a great portion of the south of the district is subjected to almost annual flood, and the effects are much more disastrous than in the north, where serious floods are of less frequent occurrence. Both the Baitarni and Subarnarekha cause damage by deposit of sand, and the latter by erosion, since it frequently changes its course.

The Baitarni deposits very little silt and the Subarnarekha a great quantity. The Baitarni has few *pal* (silt-enriched) lands upon its banks, while on the higher banks of the Subarnarekha there is a large area of such lands growing very valuable crops, though chiefly in permanently-settled tracts.

41. The ferries number eighteen, and they are under the control of the District Board, the leases being disposed of annually by auction.

Ferries.

The sale of the leases for the current year realised Rs. 6,458, and the value of those upon the Trunk Road at Phulwar and Rajghat, at the crossings of the Burabalong and Subarnarekha, respectively, was for a time somewhat depreciated owing to foot passengers making use of the neighbouring railway bridges. The practice was, however, discouraged by placing a chaukidar on guard; and since the line has opened for traffic, the use of the bridges for this purpose has been disallowed. The most important ferries are those first mentioned, the Rajghat lease realising Rs. 1,300 and the Phulwar, a few miles north of Balasore town, Rs. 1,190.

All the Grand Trunk Road traffic crosses at these ferries, and at the latter is the branching of the high road to Mohurbhunj.

The Subarnarekha at Rajghat is not fordable, and the fact that the Phulwar ferry, which is easily fordable for seven months in the year, realises almost as much is due to the greater traffic at the latter. Coolies, pack-bullocks,

and an aboriginal type of Sonthali carts, with solid wheels, come down in great numbers from Mohurbhunj, bringing faggots, charcoal, ~~and~~ timber and paddy for disposal in Balasore town. With the diminution of traffic upon the Trunk Road, following the opening of the railway, the receipts from Phulwar and Rajghat, as well as from the Salandi ferry at Bhadrak, which realised Rs. 380, will, to some extent, fall off. The latter plies only during the rains, the Salandi bed being quite dry in the hot weather.

Other ferries of importance include that of South Baliapal over the Matai, which sold for Rs. 860, and that of Balighat over the Burabalong opposite Balasore town; the lease of the latter realised Rs. 722. At the former passes all the rice from the Ankura pargana and some of Killa Kanika on its way to Chandbali, and the passage being here fordable, at no time of the year the receipts are necessarily large. On the Subarnarekha, at the crossing of the Baliapal-Kamarda Road, is the ferry of Kalikapur, which is also unfordable, the river being tidal to beyond this point.

42. The Grand Trunk Road, which runs for a length of 95 miles from and to the end of the district, affords communication with Midnapore and Calcutta on the north, and with Cuttack, Puri, and Ganjam on the south. It was built by Captain Sackville between 1812 and 1820, the portion in Balasore being opened in the latter year. Complaints regarding obstructions of drainage were common and were put forward by the zamindars, even as late as at last Settlement. According to Mr. Toynbee, the raiyuts in the neighbourhood of Bhadrak commonly indulged in the practice of cutting the road in order to allow escape to the water. *

No doubt there was considerable lodgment of flood water near the rivers Kapali and Rebo, and especially at Bhadrak itself where an Irish bridge now admits free passage to the overflow of the Salandi. The waterway generally allowed is certainly sufficient, and at such spots as the triple bridge over the Kansbans would seem excessive to one who had not seen this river in flood. In the north of the district, a few miles south of Rajghat, the road was breached in June last year by the flood of the Subarnarekha discharging along the line of the river Haskura, and breaches have occurred at the same spot on previous occasions. The waterway provided here must, therefore, have been insufficient, and damage has no doubt been caused on many occasions by lodgment of water. This has now been obviated by the construction of an Irish bridge.

The metalling of the road was not completed for forty years, and the soling appears to have been insufficient. Owing to this fact and the cutting down of the budget provision for maintenance of the road, it has rapidly fallen into disrepair, and, between Balasore and Soro, where the traffic is heaviest, it is in places almost impassable for carts during the rains.

With the advent of the railway, which closely follows the course of the road, the latter will naturally fall into some disuse, and the policy of neglecting it may, therefore, be a wise one.

There existed originally along the side the road of a number of fine brick culverts, also apparently built by the Military Department, and leading over the roadside *nalas* to the neighbouring villages. These have all been allowed to fall into decay, and scarcely any are now standing. The only route to Puri from Northern and North-Western India, this road, during the early and middle parts of the century, exhibited a constant stream of passenger traffic. Some of the pilgrims from the Central Provinces found their way down through the jungles of the Tributary States, as they had been accustomed to do before the road was built, but their number was comparatively small. *Sarais* existed at Rajghat, Basta, Balasore, Bhadrak, and Akhoyapada along the line of the Trunk Road.

They were built in 1827 at the expense of a wealthy Bengali Hindu, who also provided for many of the bridges which bear inscriptions recording his name and munificence *. It is curious that these are almost the only works of public benefit, the outcome of private charity, to be found in this district, and it is significant that they are due to the generosity of a foreigner. It is not always, perhaps, that such generosity takes so useful a shape, for the construction of these *sarais* and bridges must have done much to alleviate the

distress and misery of the wayfarers from Jagannath, when all the evils of the rainy season, swollen and impassable rivers, cholera and starvation, combined to render desperate the position of wretched pilgrims, their constitution exhausted, enfeebled by long months of travel and by the rancid "Mahaprasad" of the Holy City. The *sarais* have long since been abandoned, and all have disappeared. At Basta only is still to be seen a row of dilapidated buildings surrounding a square court-yard overgrown with jungle.

With the inauguration of the steamer services between Calcutta and Cuttack in the sixties, the Trunk Road lost its importance as a pilgrim route, and of late years only a small number have travelled by it. Now that the railway is open, scarcely any are to be seen except an occasional *fakir* measuring his length along the road upon his toilsome journey southwards.

The chief traffic of the road lies between Soro and Balasore. The former place is the central market of the Banchas Oger parganas. Here the paddy is collected for transmission by cart to Balasore and thither come imports in the shape of oil and salt for distribution at the bazaar and in the neighbouring markets. Pack-bullocks and occasional carts on their way to Balasore from Ambohatta and neighbourhood join the road a mile south of Soro. Upon the road, as a whole, however, the local traffic is inconsiderable. Each branch road and country footway supplies a small quota of carts, or more usually of pack-bullocks, on their way to Balasore or Bhadrak.

In the north of the district are to be seen many Sonthali carts and coolies from the Tributary States to Balasore with loads of timber, faggots, paddy, charcoal, and bazaar commodities such as horn, * honey, fowls, and hides, and returning with oil, salt and cloths. But the more considerable body of traffic is to or from places at a distance. Thus from Bhadrak large herds of cattle start upon their way to the Calcutta market, and trains of carts carry hides to the same town as well as to Midnapore. From Midnapore the carts return to Bhadrak and Cuttack with mats manufactured in that neighbourhood.

43. Roads to the number of 38, with a total length of 309 miles, are maintained by the District Board.

District Board Roads.

With the exception of some 40 miles, these are unmetalled, and many of them are fair-weather roads impassable for cart traffic during the rains.

In the north of the district especially they are subject to damage by each high flood of the Subarnarekha, and in June of 1898 the Kamarda-Baliapal, Baliapal Basta, Kamarda-Juleswar and Singla-Nangleswar Roads, though constructed to allow great waterway, were breached in numerous places, many of the bridges being carried away and others so scoured out as to be render unsafe for traffic. The roads abovementioned are the most important in the north of the district, since they connect the local markets with the Trunk Road; they are chiefly used by pack-bullocks.

South of these may be mentioned the Panchpara-Haldipada Road; and, at Balasore, the road to Mitrapur in Nilgiri, which passes through the important bazaar of Remna, the centre of a considerable trade in brass utensils. From this neighbourhood Balasore town draws its supply of vegetables. Further south there is a short branch road leading to Nilgiri, and at the 16th mile of the Trunk Road, below Balasore, branches the road to Talpada on the Coast Canal.

At Soro four roads converge. One from Gopinathpur on the borders of Nilgiri; another from Anantapur on the east; a third stretching to the south-west and passing through Ambohatta to Bhadrak; and the fourth a short road running through Soro bazaar and joining the Trunk Road, 5 miles lower down.

From Janjhari market, at the 29th mile below Balasore, branches the road to Basudebpur on the Coast Canal, meeting here the old salt road from Balasore now extended as far as Bhadrak.

It was by means of this road that Balasore used to derive its supply of the salt manufactured in the Arangs of the south-east. At a point midway between Janjhari and Bhadrak a road runs westwards to Kopari market in Ambohatta. At Bhadrak, in addition to those from Basudebpur and Ambohatta

* Horn of buffalo, bison, and deer.

two other roads converge, that from Keonjhar on the west and that from Chandbali on the east. A few miles south runs the road to Dhamnagar, and near the point where the Grand Trunk Road crosses the Canal a new road has just been constructed to Jajpur.

Perhaps the most important trade route is that between Bhadrak and Chandbali. The surplus produce of the south east of the district finds its way to Bhadrak, whence most of it is sent for export to Chandbali, either *via* Ruknadeipur or the Basudebpur road, whence it is carried in boats down the Matai and up the Dhamra, or *via* Kanpura on the Chandbali road, whence it travels by the Salandi. The traffic is therefore, very heavy along these portions of Basudebpur and Chandbali roads, and they should certainly be metalled, the former to Ruknadeipur and the latter to Tihiri *hat*, as they are extremely difficult for cart traffic after heavy rain.

The produce of the south-east goes direct to Chandbali along the country roads and tidal creeks, and the next collecting centre is Soro, whence, as already noted, the produce is carried to Balasore. In the north of the district there is no main centre, but produce gathers at the local markets and for export at the various parts subsequently noted.*

The necessity for the construction of feeder roads to the railway is now obvious, and two at least are already being built which will connect Khantapara and Markend stations with the Grand Trunk Road.

In addition to District Board roads there are 67 village roads, with a total length of 200 miles, under the Sadar and Bhadrak Local Boards. These are nearly all fair-weather roads, occasionally banked but generally consisting of mere cart tracks across the fields.

44. In 1830 the only public bungalows existing were those at Balasore and Baripada. The latter was a *dak* station and the half-way house for travellers between Cuttack and Balasore, being about 50 miles distant from each.

A portion of the Baripada bungalow survived until 1898, when it was condemned and destroyed, and another has now been erected in its place.

At the present day the district contains no less than 34 inspection bungalows, including the road and canal bungalows maintained by the Public Works Department and those under the District Board.

45. The first canal built in the district was that known as the Churamon or Ricketts' Canal, though why it received the latter appellation, I do not know, for, according to Mr. Toynbee's history†, it was apparently finished in 1826, the year before Mr. Ricketts came to the district.

The canal connected Churamon with the Matai river and was intended for the transport of salt from the Arangs in the south to the port of Churamon, whence it was shipped by sloops to Calcutta. The route lay through the *gher* lands of pargana Ankura, which the canal served in some measure to drain. It was, however, never entirely completed and soon fell into disrepair.

46. The Coast Canal, which connects the Hughli at Geankhali with the river Matai at Charbatia, has a length of 71 miles in this district, and runs along the sea face at a distance varying between 2 and 10 miles from the coast. It contains eight locks and is divided into four ranges, the first of which is fed from the Subarnarekha, the second from the Sartha, the third from the Panchpara, and the fourth or lowest from the Kansbans. The last three ranges have inlets and escapes to allow of the admission and exit of flood water, which thus passes across the canal to the sea.

The canal was partially opened on the 15th July, 1885, and entirely in September, 1887, the work having commenced in the year 1880. The cost was originally estimated at 36 lakhs, but this sum was considerably exceeded, and by 1894 nearly 45 lakhs had been spent, and minor works connected with the canals were still under construction.

47. Looking at the figures for the last three years, the cost of maintenance was—

Revenue of the Coast Canal.		
In 1895-96, Rs. 70,000.	|	In 1896-97, Rs. 88,000.
		In 1897-98, Rs. 61,000.

* Paragraph 68.

† Paragraph 84.

Expensive protective works are now in hand near Nalkul Lock, and the cost of maintenance is likely to show a considerable increase this year. The total receipts or gross revenue amounted to Rs. 88,000 in 1895-96, giving a profit of Rs. 8,000; to Rs. 86,000 in 1896-97, showing a loss of Rs. 2,000; and to Rs. 85,000 in 1897-98, giving a profit of Rs. 24,000. The years 1895-96 and 1897-98 are, in fact, the only years which have ever shown a profit; in no other year did the gross revenue cover the working expenses. Up to the close of 1898, the capital outlay reached a total of Rs. 45,17,000, exclusive of interest charges of which no account is kept; while the net revenue, obtained by deducting the working expenses from the gross receipts, showed a total deficit of Rs. 1,17,000. Of the receipts of last year Rs. 66,000 were tolls paid almost entirely by country boats; Rs. 17,000, tollage of the steamer service of two companies; and Rs. 1,000 for hire of the Government steamer.

The number of passengers carried by the steamer service has decreased from 1,04,000 in 1893-94 to 41,000 in 1897-98, and the receipts in tollage from this source also show a steady decline. The reason given by one of the companies for the decrease in number of passengers who are mostly booked through between Calcutta and Cuttack, was that the sea service to Chandbali had been made more frequent and was also cheaper. With the opening of the railway in March of this year passengers ceased altogether to use this route to Cuttack, and the service between Balasore and Chandbali has accordingly been stopped. The margin of profit of the companies has for some time scarcely sufficed to provide for repairs and depreciation, and there is little doubt but that the service will soon be altogether closed. If this be the case, the receipts of the canal will so far decline as to render any margin of profit over expenditure or maintenance extremely problematical in future years. Regarded as a commercial enterprise it must, in fact, be pronounced a failure, and it is interesting to note in the early literature* dealing with the canal as projected, that almost the entire export and import trade of Orissa was expected to be carried upon it. The revenue anticipated was Rs. 2,60,000, whereas cost of maintenance and interest on capital were estimated at Rs. 2,11,000. It was supposed therefore that a profit would be yielded after payment of all charges, whereas in fact so far from defraying interest on capital expenditure the canal has not even paid for working expenses.

I do not lose sight of the fact that its use as a famine protection scheme was one of the motives for its construction. This was strongly insisted on by the Government of Bengal†, but it was as strongly urged the project would prove remunerative, and the Lieutenant-Governor was so satisfied on this point that he was "prepared to guarantee the interest on the outlay." The Commissioner of Orissa, Mr. John Beames, appears indeed to have been the only local official who entertained any doubts, though these were shared by the Government of India, which declined at first to sanction the scheme. In any case there is no longer any use for the canal as a famine protective work, and as it is likely to pay in future years even less towards the cost of maintenance than it does at present, the time appears to have come for considering whether it should not be abandoned.

48. The canal being fed by tidal waters, is of no use for purposes of irrigation, and was not constructed with that intention. It does not therefore benefit agriculture, and indeed it is a common complaint of landlords and raiyats that its effect has been deleterious. It is difficult for one who is not a Civil Engineer to arrive at any conclusion upon this point, but I may at least state an opinion that the embankment of the Coast Canal prevents free egress of the Subarnarekha flood and thus raises its depth on the west side from pargana Kamardachour as far south as Sartha, and that a similar effect is produced in pargana Ankura. On the other hand it might be supposed that the canal bank would afford protection against cyclonic irruptions of the sea. But I find that this is not the case, for in 1887 the water passed over the embankment and approached to within two miles of Balasore town. If the zamindars are sincere in their

* Report of Mr. H. C. Lovings, Chief Engineer to Government of Bengal, dated 16th February, 1879. Miscellaneous correspondence consisting of enclosures to Government of Bengal No. 1069 I., dated the 22nd March, 1878, to the Government of India.

† Government of Bengal No. 1069 I., already referred to.

objections on these points it is to be supposed that they would welcome the abandonment of the canal, which might then be cut at the points where it is alleged to cause damage.

49. This canal has a range of 19 miles in this district between Bhadrak and Akhoyapada, whence it runs to Cuttack. It is

High Level Canal.

fed from the river Baitarni at Akhoyapada, and it appears that at one time it was proposed to prolong the canal to Balasore, a project which had to be abandoned because it was found that there were no rivers of sufficient size to afford an adequate supply of water.

Range III, which is that contained in this district, was constructed between 1871 and 1891 at a cost of Rs. 8,26,000, or Rs. 9,87,000 including the cost of distributaries.

The average annual cost of maintenance is under Rs. 5,000, and the gross receipts may be estimated for 1897-98 at Rs. 8,000 for transport service, Rs. 1,000 for tollage, and Rs. 41,000 for irrigation, making a total of Rs. 50,000. The net revenue was accordingly Rs. 45,000, or 4 per cent. on the capital expenditure, exclusive of interest charges. The interest charges on the Orissa Canals amount, however, at the present day to almost as much as the capital outlay, and adding a reduced interest charge of Rs. 9,00,000 to the capital expenditure, we should find that this range of the canal yielded in 1897-98 a profit of 2 per cent. Circumstances were, however, particularly favourable last year, for traffic was large and the area under assessment for irrigation greater than it had ever been before.

The canal is available both for irrigation and traffic. It is little used by country boats, but there is a bi-weekly steamer transport service between Bhadrak and Cuttack under control of the Public Works Department. This was largely used by passengers until the railway opened, and continues to carry a small quantity of goods. Turmeric, chillies, cocoanuts, and betel are imported from Cuttack; and rice, tobacco, tamarind, resin and mats, the latter from Midnapore, are sent in exchange. The transport service is carried on at a profit. The total receipts on the whole canal were Rs. 17,000 in 1897-98, while the working expenses were Rs. 18,000 and the net profit was, therefore, Rs. 29,000.

There was an increase in traffic due to the construction of the railway, some of the material for which was transported by canal. The tollage receipts from country boats on the portion of the canal within this district were something over Rs. 1,000 for the past year, and these included receipts for railway material, a source of profit which is now cut off.

On the whole, tollage revenue shows a considerable decline during the last five years. When the Railway is finally opened through to Cuttack in the approaching cold season the transport service will probably be closed.

The passenger traffic which has hitherto been responsible for the greater portion of the receipts will desert the canal, and the quantity of goods traffic is not nearly sufficient to enable the service to be run at a profit. In that case it is likely that some of the goods traffic will be transferred to country boats, and the tollage revenue may therefore show some improvement, provided the cost of carriage remains cheaper than by rail.

50. This is the only irrigation system in the district. The area theoretically commanded by the canal and its seven distributaries is 57,509 acres, of which 44,000 acres are actually provided with means for irrigation.

Irrigation from the High Level Canal.

The distributaries have a total length of 50 miles; 20,350 acres were under irrigation in 1895-96, 26,556 acres in 1896-97, 29,193 in 1897-98, and 29,537 in 1898-99. The latter figure includes 28,856 acres assessed at Rs. 41,470 under long lease, 171 acres assessed at Rs. 255 under season lease, and 510 acres under sugarcane lease, assessed at Rs. 2,551. The total assessment is therefore Rs. 44,276 for the present year. The long leases are granted for a term of years, generally seven, for the supply of water from June till March and are charged at Re. 1-8, or 8 annas per acre, according to the height of the lands; the low-lying fields which do not ordinarily require irrigation being rated at the lower figure. Season leases are for cotton, *muga*, cucumber, pumpkin, and *datura* rice, and the rate paid is Re. 1-8 per acre. For sugarcane leases Rs. 5 per acre is charged, and the increase in the area irrigated for this

crop during the last three years is remarkable. In 1895-96 there were only 282 acres; in 1896-97 about the same amount. In 1897-98 the acreage advanced to 435, and now stands at 510. This is to be ascribed to the fear that such crops would be specially assessed.

During the few years preceding settlement of rents the zamindars discouraged the growing of special crops like sugarcane, tobacco, cotton, and jute, and the raiyats were also disinclined to run the risk of imposition of additional rents.

After rents had been settled, however, a new impetus was given to this description of cultivation. Rents were settled in the neighbourhood of the canal by the early part of 1897, and the next year found a considerable increase in the sugarcane area. The new water rate rules lately introduced afford some facilities to raiyats for the execution of *dalia* leases. This crop is always largely grown after a failure of the winter rice, but the normal area under it is very small. In the present year no season leases appear to have been executed for *dalia* cultivation, although in 1896, after the short *sarad* crop of the preceding season, no less than 1,993 acres were under irrigation, chiefly in pargana Bayang.

The area irrigated for cotton remains stationary at 16 acres, while the average of *muga* is 130, of pumpkin 19, of cucumber 5, and of *brinjal* 1. For the four latter species of crop no leases appear to have been taken out in 1896.

51. Exhaustive enquiries on this subject were made in 1896, and a report was prepared by Babu Sri Gopal Bhattacharjee, Assistant Settlement Officer. The general conclusion was that rents were not higher in irrigated than in unirrigated areas.

There was no evidence tending to show that any enhancement of rent had been made on account of irrigation, or that rents were higher in irrigable than in unirrigable villages. It may be safely said that collections are better in irrigated villages because the crop is more secure, and also that irrigation renders possible the cultivation of special crops which pay a higher rent, but this is the sum of the advantage derived by the zamindar. I am not disposed to think that the raiyat reaps a considerable profit after payment of the water-rate, except in the case of particular crops like sugarcane. Irrigation of rice lands is usually resorted to for the added security which it affords. It is a method of insurance which minimises the risk of loss.

If the crop experiments made by the Public Works Department be examined and some which are clearly inaccurate be excluded, it will be found that the difference in the yield of irrigated and unirrigated lands is seldom more than two or three maunds, which in itself is scarcely sufficient to compensate the raiyat for the expense and trouble of taking out a lease.

52. This is a branch of the Bengal-Nagpur Railway, and the construction was commenced in 1895. The line will connect Madras with Calcutta and *via* Sini, with the Central Provinces and the Punjab.

In February of 1899 the line was opened temporarily for traffic, through connection between Sini and Madras being made available. A portion of the line between Kola on the Roopnarain river and Calcutta being still under construction, the connection is made by steamer service.

A daily steamer service on the High Level Canal is, however, proposed to be maintained between these two places.

As regards the physical effect of the construction of this line, it is still early to form any estimate. The waterway allowed appears to be sufficient and has in several cases been much increased since the original plans were formed. I believe if any lodgment of water is caused on the west of the bank, it will be in the neighbourhood of the river Kansbans, the flood of which is both high and sudden, but this stream rapidly subsides, and the water is not likely to stand sufficiently long to do damage to crops.

Individual fields must necessarily suffer here and there, while others will be correspondingly benefited, but no general effect is anticipated. Scarcely any

complaints were made by raiyats on this score at the time of assessment, and if any grievance had existed, it would assuredly have been brought forward. When the Grand Trunk Road was constructed zamindars and raiyats alike were up in arms, and I believe their complaints were in some instances substantial. Moreover, very liberal compensation has been paid.*

53. Considering first the area lying between the Coast Canal and the sea,

Physical aspect summed up.

we have here, extending upwards from the river Gamai to the Burabalong, a great plain of grass lands, the grazing ground of herds of cattle and buffalo, with occasional sparse patches of cultivation and low scrub jungle upon the sand ridges and near the tidal streams. South of the Gamai between the protective embankment and the sea, the aspect is the same. Between the Burabalong and Hanskura there is a little cultivation immediately on the east of the canal and beyond this a network of tidal creeks fringed with heavy jungle.

From the Hanskura to the Subarnarekha there is cultivation inside the wooded sand hills which run in parallel ridges along the coast. At the mouth of the latter river and along the tidal creeks spreads impenetrable jungle, and upon the north side the coast line is marked with sand ridges which protect the cultivated lands extending to the canal.

On the west of the district where the boundary approaches the hills and the lands are higher, the aspect is of a reddish rocky soil partially broken up to yield a scanty crop, and exhibiting patches of jungle including a little *sāl* which rarely attains to any size. Yet in other places where the hills run precipitously to the arable lands these are often of considerable fertility taking in a supply of rain water which brings with it the vegetable sediments drained from the higher ridges.

The remainder of the district is a plain of arable lands varying in level from *pāts* or low lands, as the Talhati in Bayang, the Ankura *pāt* and Babaria *gheel* in Kamardachour to the stretch of higher lands in the centre running from pargana Balikhand upwards, and widening towards the town of Balasore.

54. The average temperature varies from 47° to 91° during the months

Climate

of December, January, and February; from 62° to 109° in March to May; from 60° to 91° during the rains, and from 56° to 92° in October and November. 116° in the month of May is the highest temperature, and 44° in the month of December the lowest recorded in recent years.

A sea-breeze, regarded as unhealthy by the native population, rises after midday and penetrates eight or ten miles inland during the cold and hot season. From March to August the general set of the wind, according to the matutinal readings, is from the south-west, and from September to February from the north-west.

The rainfall averages 60 inches, of which in normal years nearly 6 inches fall from November to April and 5 inches in May, propitious to the labour of ploughing; 9 inches fall in June, 12 in July, 11 in August, 11 in September and 5 in October. In April and May the district is visited by severe thunderstorms, which gather in the hills and descend upon the adjacent plains.

Of endemic diseases that known as *Elephantiasis arabum*, but more properly in the light of recent researches as "*Filaria sanguinis hominis*," is the most common and attacks nearly 30 per cent. of the population. Fever and chill are common sickness in the cold weather, but the country is singularly free from malaria, saving only in Jaleswar thana where a severe type of this disease is prevalent and retards the growth of population. Of epidemics, cholera makes its appearances immediately before and after the rains, chiefly in the towns. It seldom spreads to any extent and causes no great mortality, though there were severe visitations in 1853 and during the famine year of 1866.

During the last sixty years, the district has not, comparatively speaking, suffered from the violent cyclonic storms and irruptions of the sea which caused so much loss of life and property during the early years of the century.

In 1831 a terrible cyclone swept over the entire district and storm waves devastated the sea face, covering the land to a depth of 3 to 30 feet and depopulating a third of the district. In July 1872 occurred the most violent

* Paragraph 218 of Mr. Kingsford's report on Balasore.

storm of late years. It was accompanied with tidal irruption all along the sea coast, and some lives and great numbers of cattle were lost. Cyclones have occurred on several other occasions in 1849, 1858, 1863, 1866, 1882, 1886, and 1887, but do not appear to have been attended with loss of life. They generally cause inundation, however, and in 1887 the sea swept over the Coast Canal embankment and penetrated to within two miles of Balasore town.

Of floods the highest within living memory was that of 1868, which occurred after a fortnight of heavy rain. The month was June and therefore little damage was done to crops, though nearly every river in the district overflowed.

Of inferior height but more serious in results were the floods of 1892 and 1896, and in the latter year there was great loss of crops in the south of the district. Other years of high floods are 1855, 1866(5) 1872, 1883, 1886, 1888, 1894, 1897, and 1898.

No part of the district, except the irrigated area in the south-west, is secure from drought in seasons of abnormally short rainfall. Drought, however, most commonly occurs, though not often in an aggravated form, on the upland stretching from Balikhand to Balasore town, at which point it widens across the district. Even here there is a good quantity of low-lying land, so that the effect is not commonly severe.

The worst droughts since last settlement were those of 1852 in parganas Bayang and Dhamnagar, and of 1875 in Soso, both in the south; while in 1836, 1839, 1840, and 1865 the loss of crops was common to the greater part of the district and in the latter year culminated in the great famine.

55. There is no comprehensive system of protective embankments in this district. In 1853 it was stated† that the embank-

* Embankments. — Embankments measured 91 miles. Many of these were small agricultural embankments erected sometimes for irrigation purposes across the beds of streams and sometimes to guard against flood.

In a few cases zamindars were, at last settlement, allowed expenses for maintenance, but the more important embankments were understood to be under the control of Government, and Mr. Mills‡ stated that in "estimating the assets, regard had been had to the continuance of the embankment." It was subsequently found by the Public Works Department that many of the old zamindari or agricultural embankments were either useless or actually harmful in their effects.

These are known as Class IV, and have for many years been neglected with the intention of abandoning them at this settlement. Accordingly there are now only three embankments of this nature which the Public Works Department proposes to maintain. The remainder have been surrendered to the zamindars on the understanding that Government have nothing further to do with them. The total existing mileage under control of this Department is 84, of which a length of 74 miles is under class I and II, and situated on the river Subarnarekha and Suma on the north, the Baitarni, Salandi, and Ganguti in the south, and along the sea face in pargana Ankura.

56. In considering the fiscal divisions of the district, it will be convenient to notice the parganas first. These are the old Parganas. fiscal divisions, known as "*Bisi*" or "*Khand*"

under the Hindu kings, and placed under the charge of revenue officials who were responsible for the collections. Under the Moguls these divisions were known as parganas, but the original designations still survive in some of the names, as in Nunkhand, Derabisi.

As the pargana became subdivided into an increasing number of taluks it still remained a centre of the collection system, and when, owing to alienations and combinations of the lands of various taluks, many estates became possessed of areas outside the border of their proper pargana, those areas were *de facto* included within that pargana. Hence the existence of those numerous *tahasila/ahidas* which are such a perplexing feature of the present parganas. It has been the custom to regard any village the greater part of which belonged to an estate in another pargana as a *tahasilahida* village of that pargana, and

* See map No IV.

† Sir Henry Bicketts' Report on the district of Balasore.

† Mr. Malls' Minute of 1851.

the same confusion has been imported into the designation of small portions of villages which belonged to an estate holding a neighbouring village, those being regarded as *tahasilalahidas* of that village and named accordingly.

The pargana divisions bear little reference to physical or other facts, and considered as local divisions they are confusing and troublesome. As exhibiting, however, a combination of a number of neighbouring estates they have some use for statistical purposes. The number of parganas* now existing in this district, so far as the temporarily-settled portions is concerned, amounts to 67.

Thanas.

57. I may now turn to the subject of thanas, which will naturally lead to that of villages,

houses, and population.

I propose to deal with those figures in the appendix which include temporarily-settled and (*lakhiraj*) lands and exclude permanently-settled tracts and the Kanika Ward's estate. My remarks will therefore not have reference to the latter except when expressly included. The district contains two subdivisions, of which the Sadar includes the five thanas—Basta, Jaleswar, Baliapal, Balasore and Soro, with an area of 962 square miles, while the Bhadrak or southern subdivision includes four thanas—Bhadrak, Dhamnagar, Chandbali, and Basudebpur, with an area of 750 square miles.

58. The thanas were constituted in 1806 as convenient local divisions for police administration, and the boundaries of parganas being known and familiar to the people, the

Origin of thana.

thanas were as far as possible constituted of whole parganas. From the date mentioned, the district was divided into four thanas—Basta containing 551 villages, Balasore 536, Soro 622, and Bhadrak 949. In 1853 the number was six, and it is now nine. That of Basudebpur, then known as Chauramon, was subsequently separated from Soro, and those of Dhamnagar and Chandbali from Bhadrak.

The thanas of Baliapal and Jaleswar in the north were included at the revision of the district boundary in 1868. Basta and Baliapal thanas contain a considerable number of permanently-settled estates, and Jaleswar is almost entirely permanently settled, while Chandbali contains the Kanika Ward's Estate. Of other thanas, Soro, in the centre of the district, is far the largest, containing an area of 399 square miles, 881 villages, and a population of 218,000. Thanas Chandbali, Bhadrak, and Dhamnagar are the most thickly populated, the density in the former reaching the figure of 647 to the square mile.

59. The total number is 3,667, of which 3,044 are inhabited and 563 “*bechapari*”—literally—“without roof.” On the

Villages

average there are something over two villages to the square mile, and in the north of the district villages are smaller and more numerous, while in the south they are larger and fewer.

Bechapari villages are most common in thanas Balasore and Basta, and this is due not to the fact that there is less ground suitable for village sites, but apparently to some eccentricity of survey. The average size of a village is 304 acres, and varies from 489 acres in thana Basudebpur, where the coast side *bechapari* villages are very large, to about 250 acres in the north of the district. The villages in Jaleswar are chiefly small “*Dian chaks*” or “*tahasilalahidas*” contained in permanently-settled villages. Villages generally are larger and in consequence “*bechapari*” villages fewer in the south.

The average population of inhabited villages is 298, and varies from 353 in the south to 249 in the north. Inhabited villages in the south are generally half as large again as in the north.

60. The total number of houses, including cow-sheds, stores, and other such buildings, is 182,459, and of these 134,534 are dwelling-houses. The latter figure excludes,

Houses.

however, the dwelling-houses in the towns of Balasore and Bhadrak, which may amount to about 6,000. This gives an average of between six and seven persons to each dwelling-house. The number may be seen large, but it is to be remembered that a dwelling-house is often of considerable extent, containing two or even three joint families, and, further, that the well-to-do raiyats

* See Appendix D. B. of the report.

frequently keep a servant who resides on his master's premises and has no house of his own.

The number need not therefore affect the estimate of the average number of persons in a family, which, including resident servants, is generally taken as between five and six. The average number of dwelling-houses in inhabited villages in the south is 57, and in the north 37; it has already been said that these villages are larger in the south, and they are also more thickly populated. Throughout the temporarily-settled portion of the district each inhabited village contains an average of 44 dwelling-houses to a population of 298 souls.

61. According to a rough census made in 1840 at the time of survey, the population amounted to 651,000. In 1865, before the famine, the figure was 732,280, and after the famine it was estimated at 485,113. If the estimate of mortality was correct, the population certainly recovered with extreme rapidity during the subsequent six years, for in 1872 it had reached the figure of 770,232.

During the next nine years the increase was 22 per cent., and in 1881 the population numbered 945,280. By 1891 it was 994,625, an increase of 5 per cent., and adding 3 per cent. for the last eight years, the present population may be estimated at 1,024,463.

The fact that since the famine of 1865-66 the population of the district has increased from 485,000 to one million marks an extraordinary power of recuperation. Taking the increase between 1865 and 1872, from 1872 to 1881, and from 1881 to 1891, we find that the percentages are 59, 22, and 5, respectively, and it is not unnatural to draw the conclusion that at the present day the population has almost reached the limit which the land is capable of supporting. The 59 per cent. increase in six years, though a small portion of it is due to the return of emigrant raiyats, exhibits* the rate at which, under circumstances admitting of free expansion, population may be expected to develop, but if the rate of increase from 1881 to 1891 was only 5 per cent., it becomes necessary to consider to what cause the decrease is due.

It is obvious, in the first place, that after a large mortality and abandonment of cultivation, the facility in obtaining land, and the reduction in the size of families, by rendering subsistence a matter of much greater ease, encourage corresponding increase in population. As circumstances change and subsistence becomes more difficult, there is a natural check to population, so long as the standard of comfort is not abandoned. But these reasons in themselves appear insufficient to account for the lower rate of increase, and as methods improperly called Malthusian are never resorted to by any except the educated classes, undoubtedly the further explanation required is found in the habit of emigration largely prevailing in the district.

62. Some note as to composition of the population at the census of 1881 may be of interest—

Total population of			Musalmans—		
1891	...	994,625	Number	...	24,250
Males	...	481,638	Percentage	...	2
Females	...	512,987	Buddhist, Christian and		
Hindus—			others—		
Number	...	969,211	Number	...	1,164
Percentage	...	97	Percentage	...	1

Of the first six castes, Brahman, Baidya, Karan, Kayastha, Kshatriya, Khandait, which rank as high, only three are numerous—

Brahmans	...	119,289	...	12	} per cent. of the total population.
Karans	...	24,773	...	2	
Khandaits	...	185,852	...	18	

Of the intervening castes, most of which rank as *hatua*—or manual labourers—the following are most numerous:—

Goura	73,463	Tanti	...	56,767
Bhandari	17,087	Goala	...	33,820
Guria	13,190	Kamar	...	11,194
Raju	40,750	Kumhar	...	11,218
Chasa	20,672	Dhoba	...	22,625
Teli	46,890	Rarhi	...	24,848
Kcuta		26,110		

* It is also not improbable that the figures of the census of 1865 were wrong.

Amongst the low castes may be mentioned—

Gokha ...	7,147	Pan	54,319
Kadma			83,593

According to the census report the agricultural population numbered 750,607, or 75 per cent. of the total, and of these, 299,000 were set down as actual cultivators.

63. The present population of the District is, according to Mr. Kingsford's estimate, 1,024,463¹, of which 908,733 are resident in the 1,712 square miles now under settlement. The largest thana, Soro, contains the largest population, viz., 212,000, while the smallest, Jaleswar, including its permanently settled area, contains 55,000. The density varies, in thanas entirely temporarily settled, from 635 to the square mile in Bhadrak to 404 in Basudebpur. The average density in the south is 572, in the north 499, and throughout the entire District 531.

That the density of population should have attained in one thana to the figure of 635 to the square mile, or one to the acre, may seem alarming. It is clear that under such circumstances the subsistence limit has been nearly reached. In 1793 the density in well-peopled districts of Bengal, including Bengal, Bihar, and what was then called Orissa but is now Midnapore, was estimated at 200² and the total population at 25,000,000. This had risen by 1882 to 60,000,000, and the density throughout Bengal rose, therefore, to 480, which is little less than the average for this District.

64. The only towns worthy of the name are Balasore and Bhadrak, the former with a population of 21,000 and the latter of 16,000.

Balasore³ though it includes an extensive bazar, is in effect a collection of hamlets, and the area included within municipal limits is no less than 3,404 acres, or 5 square miles surveyed in 28 villages.

The town lies upon the right bank of the river Burabalong, about 15 miles from the mouth, though only 6 miles in a direct line from the sea. This was one of the earliest European settlements in India, and its history presents some features of considerable interest. Popular tradition ascribes the derivation of the name to the Mahadeb Baneswar whose temple still stands in Purana Balasore. It is said that in the Dwapara Yuga, or third of the Hindu ages, a demon king named Banasura dwelt in the portion of the town now known as Sunahat⁴.

He established and named after himself the shrine of Baneswar, and it was his custom every morning to repair to this and to four other temples—Gorgareswar at Remna, Khajureswar near Sergah, Bakreswar in the village of Bankeswar, and Mani Nageswar in Bardhampur—and after performance of his devotion to return to his palace by midday. Incredible as the performance of this daily journey of some 40 miles or as the very existence of the demon may appear, the survival of two great tanks lying near the site of the supposed palace of Banasura and the remains of the moat round the dwelling of his daughter, Usá, whose name still survives in that of the village Usamerha⁵ may go some way to convince the modern antiquarian of the authenticity of this mythological legend. However this may be, Balasore remained an insignificant village inhabited by fishermen and milkmen until the year 1642, when the British factory was established.

As early as 1514 the Portuguese had effected a settlement at the ancient port of Pipili on the Subarnarekha, 30 miles north of Balasore. The site is now lost, and the only of European colonisation is found in the name of the pargana Sahubunder⁶. In the beginning of the seventeenth century the Portuguese settlement was deserted, and in 1635 the first British factory in Bengal

¹ This does not quite agree with the estimate in paragraph 170, where I take the population at 1,060,000.

² Leslie Brooke's *Husbandry of Bengal*, written in 1794.

³ The information given regarding this town is compiled mainly from a report submitted by Babu Abhoy Prasad Das, Assistant Settlement Officer, a resident of the town.

⁴ Properly "Sounah," the bloody, so-called after the fight between Banasura's men and his daughter's lover Pradyumna, the son of Krishna.

⁵ More properly Usáberh, or the dwelling-place of Usá.

⁶ Sahab-bunder, the Sahab's port.

was established on its ruins under a *fīrman* of the Mogul Emperor Shahjehan. Five years later the patriotism of Dr. Broughton secured permission for the erection of a factory at Balasore, and the location of Pipli having proved inconvenient owing to the silting of the Subarnarekha, the little colony removed its quarters to what is now known as the village Barbuti on the right banks of the Burabalong, a mile below the site of the modern town of Balasore.

The factory was protected on one side by the river and upon the other three by a deep moat, and a native village inhabited by the artisans and weavers who worked for the company sprang up rapidly around it. The trade at this time was in "Satran" a kind of coarse longcloth, and in muslin for the manufacture of which Orissa had early been famous. Though surrounded by strife and dangers, the colony continued its peaceful existence for upwards of a hundred and thirty years, and the only occasion when its security appears to have been menaced was in 1688. In that year, on the outbreak of hostilities between the British and the Mogul Emperor, when the company's servants removed in a body from the Hooghly to Balasore, the Governor of the town seized two factors as hostages, whereupon Captain Heath burned and plundered the town. But as early as the year 1700, the Burabalong, like all Orissa rivers, had commenced to silt at the mouth, and the passage of the bar gradually became more difficult. From 1751 the decline of the factory set in, and it appears to have been ultimately abandoned before 1784. It was found in ruins when the British entered Balasore in 1803. The only traces of it now existing are the graveyard and a house in Barbuti said to occupy the site of the old factory building. This house is now the residence of one Baidyanath Kar and was at one time the Collector's cutcherry, built by Mr. W. Blunt as Commissioner. The cemetery contains 33 graves with dates from 1684-86.* Little remains to be said as to the town itself. The residents include some of the leading zamindars, such as Raja Baikuntha Nath De Bahadur, Babu Raj Narayan Das, the Mandal family, and a considerable trading community, the importance and wealth of which is rapidly on the increase. Some of the merchants are Uriyas and Bengalis, but the majority are Musalmans, Madrasis, and men of Bombay. The *Telis* in particular are acquiring considerable local influence as large money-lenders.

The town is the head-quarters of the District, and the administration includes a District Magistrate and Collector with three or four Deputies, an Executive Engineer, a District Superintendent of Police, a Civil Surgeon, who is also Health Officer of the town, a Munsif, three benches of Honorary Magistrates, and a Sub-Registrar. A proof range under control of an officer of Royal Engineers has lately been established at Chaudipur, near the mouth of the Burabalong, and an office and other buildings in connection with it are in process of erection in the town.

There is a jail, a general hospital, a charitable dispensary, Roman Catholic Mission with a school and orphanage, and a settlement of Free-will Baptists from New Hampshire, U. S. Just outside municipal limits, to the west, are the quarters of a District and Assistant Railway Engineer, together with the new station buildings which are now approaching completion.

The railway bridge over the Burabalong was opened on the 9th May of the current year, and though in regard to size it does not compare with those of the Brahmini and Mahanadi in Cuttack, yet it has an importance of its own as an imposing structure, as the only bridge in the Province constructed over tidal waters, and as the visible sign of the commencement of what may prove a new era in the trade and material circumstances of the District.

The climate of the town is healthy, and, with the exception of cholera outbreaks before and after the rains, there is little sickness. The rainfall is large and has averaged 70 inches during the last five years. Opium-eating is properly described as the curse of the town, which has earned for itself an unenviable reputation for the abnormal quantity of the drug consumed. The lower classes especially regard it as a preventive of chill and fever, and men, women, and children alike look upon it as an item of their daily food.

It remains to notice Balasore as a port. At the commencement of the century it was the only one of which Orissa could boast, and though after the

* See paragraph 30 of Mr. Kingsford's Report, page 396 of the Appendices. Sir Henry Ricketts was buried in England and his body was not brought over, as Mr. Kingsford was informed, for interment in Balasore.

abandonment of the old settlement trade stagnated until the British entered the Province in 1803, the circumstances of the port subsequently rapidly improved.

In 1853 the sloops numbered 167, although 44 had been lost in the gale of 1851, and the trade was rapidly increasing. Between 1848 and 1852 the annual value of the imports rose from Rs. 83,000 to Rs. 1,01,000 and of the exports from Rs. 12,600 to Rs. 1,99,000, nearly the whole of the latter being rice and paddy.

The highest export figure was reached in 1850 when the amount was Rs. 3,49,000, and the subsequent falling off was attributable to the loss of shipping in the town. The manufacture of salt gave the chief impetus to trade, and with its abandonment there was a considerable decline. It is not necessary to deal further with the present trade than to note that in 1897-98 the total value of the exports was Rs. 12,96,350 and of the imports Rs. 16,25,561, and that since 1850 a new and valuable export trade has arisen in stoneware of "Muguni," quarried chiefly in Nilgiri.

65. The British was not the only factory at Balasore, for the French, Dutch, and Danes also possessed settlements. The two latter, known as Ulanahi and Dinamardanga, were ceded to us in 1846, and are now held as khas mahals and leased to Raja Baikuntha Nath De. The area of each is 7 acres. The moat round the Dutch factory known as Ulan nala and the graveyard, containing two old-fashioned monuments, are still in existence.

The French settlement was never ceded, and still remains the territory of that nation. It is under the authority of the Administrator-General at Chandernagore. I cannot ascertain whether this factory, known as Frasdanga, was ever captured by the British; but the French certainly ceased to occupy it, and under the treaty of 1783 it was restored to them with their other factories, the restoration being actually made in 1786. The area at this time appears to have been 64 acres, which, according to the map of last Settlement, had diminished to 43 acres. At the present Settlement an area of 169 acres was claimed as French territory, and Mr. Maddox was directed to enquire into the matter. He held the claim to be untenable, and his recommendation that the area should be limited to 38 acres, of which the French were actually in possession, was accepted by Government. (A considerable portion of the old area has been washed away by the river.)

The lease of this French territory is disposed of annually by auction and generally fetches a considerable sum, the profits to the lessee from the Abkari revenue alone being Rs. 250 per annum. The lease realised as much as Rs. 925 in 1878, when it was purchased by the Mandal family, who were anxious to control the Frasdanga blacksmith's trade so as to hold a monopoly of it in their neighbouring bazaar. In the following year again it realised Rs. 462, the purchaser being desirous of establishing a monopoly in the liquor business of the town. The former lessee Raghunath Mahapatra made the position of both his successors so uncomfortable that neither afterwards came forward, and he purchased the lease himself in 1880 for Rs. 100. It has since passed into the hands of Raja Baikuntha Nath De.

The existence of Frasdanga has been a fruitful source of trouble to the British authorities. Resort to it was at one time habitually made for the purpose of disposing of stolen goods, and for other criminal purposes, and in 1893 a criminal case which attracted some notoriety was brought by Raghunath Mahapatra against the lessee on the charge of kidnapping him out of British India. All three settlements were centres for the illicit traffic in opium during the early part of the century, and the drug was smuggled into British territory in large quantities.

66. This is the head-quarters of the southern subdivision, and lies on the bank of the Salandi at the 43rd mile of the Trunk Road below Balasore.

Bhadrak *

It consists of a group of hamlets covering an area of some 3 square miles, and contains a population of 16,900, of which 75 per cent. are Musalmans. The town contains two quarters, the Naya bazaar on the right bank of the Salandi and the Purana bazaar on the left. The former is situated near the Trunk Road,

* This paragraph is written from information supplied by Babu Harakrishna Mahanta, Assistant Settlement Officer.

and contains numerous lodging houses for travellers, for suitors in the courts, and for the clerks and muharrirs in Government employ.

Provisions are the chief commodities sold in this bazaar, though a short time ago some Bengali merchants opened shops for the sale of tobacco and piece-goods. The real centre of trade is, however, the Purana bazaar, where the Musalman element is strongest. The mahajans, zamindars, and merchants reside here, and Messrs. Turner, Morrison and Co., have a store for the sale of Liverpool salt and petroleum. Another business for the sale of Madras salt has lately been opened up by a company for which Messrs. Macneil and Co. are the local agents.

In addition to the stores and shops there are two markets held weekly upon Wednesdays and Saturdays. Some description of these will be found under that heading,* but it may be noted here that the Wednesday market is the most important in the District, and that sales of cattle, timber, and fuel take place there to a large extent.

The following are the principle articles of trade :—

Rice and paddy are purchased during the five months following the *sarad* harvest by Bombay Nacoda merchants either from the local rice dealers or through agents who visit the smaller market.

Salt.—Imported by merchants to a small extent from Calcutta. The chief business is done by Messrs. Turner, Morrison and Co., who, in the year ending March 1899, sold 35,191 maunds, value one-and-a-quarter lakhs of rupees, at Rs. 3-10-6 per maund.

I believe the above firm is likely to be supplemented by the new agency already referred to, since the Madras salt can be put on the market at a cheaper rate than the Liverpool article.

Kerosine Oil.—The sales of the smaller merchants amount to an annual total of Rs. 5,000. The largest importers are, however, Messrs. Turner, Morrison and Co., who sold last year 7,536 cases at Rs. 3-11 per case; total value Rs. 27,600.

Cotton.—There are four merchants who import English cotton piece-goods from Calcutta to the total value of one-and-a-quarter lakhs of rupees annually.

Cattle.—Sheik Inan and some five other Musalman merchants purchase cattle at the local markets of Bhudrak, Dhusuri, Ramchandrapur, and Duhai to the number of about 9,000 annually. Taking Rs. 10 as the average, the value of the trade amounts to Rs. 90,000. The cattle are sent by the Trunk Road to Midnapore, where some of them are purchased as plough oxen, but most go to Calcutta and further north, where they supply the meat markets.

Hides.—Golab Khan and half a dozen others control the trade, and the value of the export is about Rs. 72, 00 per annum. The hides are sent to Calcutta, a few by Balasore, but most by Chandbali.

Yarns.—English and Bengal twist for the manufacture of local cloth is imported to the annual value of Rs. 23,000.

Turmeric, chillies, sugar, and cocoanuts are imported by steamer from Cuttack by three Marwaris and by other local traders. The sugar is in the form of molasses, and *kaula*. The same merchants export resin and tamarind to Cuttack.

Betelnut, spices, wheaten flour, refined sugar, potatoes, and plantains are imported, to the annual value of Rs. 10,000, from Calcutta via Chandbali by Sankar Sahu and others. A small quantity of potatoes and betelnuts also comes from Cuttack.

Ghi is brought from the grazing grounds of pargana Ankura, and some is exported to Calcutta and Midnapore.

Though living in the town is dear and a proverbial saying runs that fuel costs a pice for half a seer, the townspeople are prosperous, and even the

beggars have lands.* There are very respectable resident Musalman families, and they are careful to maintain a position and social observances which distinguish them from the ordinary Mahomedan community in the mufassal. The climate is considered superior to that of Balasore, but there are severe outbreaks of cholera in the season preceding the rains.

67. The number of markets in the temporarily-settled portion of the

Markets.

District is 59, and particulars of area, position, assessment and of the commodities ordinarily sold

at each will be found in the Appendix referred to.

Many of the markets are situated on *bahal*, and the most important of all, that of Bhadrak, on *bazyasti* land. The total assessment imposed on the zamindar in whose estates markets lie amounts to Rs. 783, and it was fixed as a ground rent varying from Re. 1-3 to Rs. 210 per acre.

Though, with a few exceptions, they are not of great size, they are well distributed for the supply of local wants and as centres where grain collects for export. It is likely that, in the course of the next few years, markets of considerable size will spring up in proximity to the railway stations, and some that now exist in less convenient situations will decline.

The commodities ordinarily exhibited for sale include cottons of local and English manufacture, brass and bell-metal utensils and ornaments, kerosine oil, provisions of all sorts, such as paddy, rice, salt, spices, molasses, dried fish, vegetables, *dal*, fruits, fresh fish, castor and mustard oil, grain, confectionery, fried rice, milk and *pán* for chewing, earthenware pottery, blacksmiths-ware, mats, brooms, fuel, cheap finery, hair oil, mirrors, combs, soap, needles, pins, tobacco, *sál* leaves, scrap-iron, cotton, thread, string, rope, and small utensils and lamps made of tin.

At markets of a larger size there is often a trade in special articles including cattle, timber, charcoal, yarn, tamarind, resin, drugs (opium, *bang* and *ganja*) medicines, *ghi*, *tari*, and Uriya books and tracts sold by the missionaries.

In the cold season Kabuli pedlars sell warm cloths of various descriptions. The regular shop-keepers do a lucrative trade, and make a profit from 50 to 100 per cent.

From noon till 9 o'clock at night the Uriya market presents a busy scene. The traders set out their wares each in his appointed place. The drummer and flute-blower make music at every shop in turn and receive a few pies or a small article exposed for sale. The sweeper collects a similar contribution. The village postman attends to deliver letters, and the zamindar's peons to press the *raiya*s for their rents. People, women predominating, flock in with rice or fish for sale and to make purchases for the weekly family wants. The *dandálar*, or weigher appointed to supervise the market, goes round to receive his commission on the sales or to give his opinion on the rates to prevail for the day. The gomasta, of the zamindar, or of the *ijaradar* who has taken a lease of the market, collects his fees (*tala*) in kind or cash, or sometimes a stipulated annual rent from every shop. The money changer exhibits piles of small coins and cowries, and a shop keeper may be seen bartering his goods in exchange for some articles of domestic requirements.

In the north of the district the three markets of most importance are Singla in Nagleswar, Deula in Bhograí, and Shahaji in Remna near Balasore. The average attendance at these is probably seven or eight hundred, and people come to them from a distance of 10 or 12 miles.

The two daily markets of Balasore town are entitled to some notice. The more important is that in the centre of the town, belonging jointly to the zamindars of the Mandal family, Babu Rasik Charan De and Babu Dolgobind Ghose.

The market contains some brick buildings erected by the Mandals, and these are occupied by the fish and vegetable sellers. The Mandals are proprietors of the fishery estate in the river Burubalong, and have shown some enterprise and business capacity in providing the fishermen with means for disposing of their catch.

Vegetables from Remna and the villages near the town, sea-fish from Chandipur on the coast, seasonable fruits, including pineapples, guavas,

* One of these professional beggars was receiving a dole of rice from an Assistant Settlement Officer in the town proceeded to urge some grievance with reference to the assessment of his *thana* holding.

plantains and a species of orange from the *Garhjats*, are daily brought for sale, and at the bi-weekly market there is a trade in brass and bell-metal ornaments and utensils, and in cloth which is largely, purchased by Santhali women from the *Garhjats*. At the approach of the rains *chamars* bring umbrellas, hats and *pakhias** of palm-leaf and bamboo.

The markets are let out to contractor, who collect fees generally half a pice per day, from the sellers. The shops are paid for at from Re. 1-8 to Rs. 2-8 a month. The lessee of the vegetable markets pays a rent of Rs. 25 per month, and Rs. 15 a month is paid by the *ijaradar* of the fish market. The market is capable of improvement and requires a supply of drinking water. It is under the control of the Municipality, which levies a quarterly tax of Rs. 35.

The other market is situated on the Trunk Road and was constituted as a *sarai* for travellers. The trade is in provisions only. It is let out annually by the Municipality by auction, and the rent now realised is Rs. 106. It contains lodgings for travellers and suitors in the Courts, but with the advent of the Railway its importance as a *sarai* for travellers is declining. The lodgings are now occupied by Railway contractors and coolies.

In the south may be mentioned Chandbali Jamhari on the Trunk Road between Soro and Bhadrak, and Turigaria in Mangalpur; but the most important of all is that of Bhadrak known as Esafpur.

This consists, in fact, of two markets, one of which is situated on *bazyasti* land and the other on that of Babu Radhakant Rai Mahasoy, Zamindar. The latter has been lately established and has attracted much of the trade of the older market.

The specialities of the old market are timber and cattle; the yearly sales of the latter averaging 6,500, value Rs. 39,000, which gives a price of Rs. 6 per head. Each purchaser pays to the *ijaradar* a fee of 3 pices per rupee, while the sellers pay a similar amount per head of cattle and the total fees derived amount to Rs. 700. Various portions of the markets are let out annually to *ijaradars*, the leases being disposed of by auction.

The fee levied on the sale of timber varies from $1\frac{1}{2}$ to 6 pices according to size, and the annual amount paid by the *ijaradars* of this portion was found to be Rs. 120. The income derived from shops is Rs. 700. The total annual sum realised by the *bazyastidar* after deductions of the *ijaradars*' profits on cattle and miscellaneous shops, probably does not fall short of Rs. 1,000.†

68. The tendency of Balasore rivers to silt at their mouths has been fatal to the stability of almost every port in the district.

Ports.

It was on this account that Pipili was abandoned in 1642, and the same cause led to the decay of Balasore during the last century.

In the year 1871 there were said to be seven principal ports—Subarnarekha, Sartha, Chauna, Balasore, Laichanpur, Churamon, and Dhamra (including Chandbali). Owing to the silting up of the river mouths and to the construction of the Coast Canal, which facilitated the silting while it also provided a new waterway, and to the abandonment of the salt manufacture, some of these have ceased to exist, while the position of others has been changed. Thus Subarnarekha is now represented by Batanga and Mandhata on the Coast Canal and Barbatia on the Gochida river. Panchpara has taken the place of Sartha; Chauna, Laichanpur, and Churamon‡ have ceased to exist. A new port has formed at Baliapal on the Matai river, and Chandbali has absorbed the trade of the old port of Dhamra situated 15 miles lower down the river at the confluence of the Matai.

Some account may now be given of the seven existing ports, in the order of their importance, with the exception of Balasore which has been already treated of as a town.

The establishment of this port is due to the enterprise of Captain Macneil, who, thirty years ago, sailed up the Dhamra with

Chandbali.

Mr. Ravenshaw, Commissioner of Orissa, with the intention of discovering a suitable site. Chandbali, which was then a small village occupied by a few fishermen's huts, was found to combine the advantages

* A shade made of palm-leaves to protect the head and back from sun and rain.

† Particulars obtained from an enquiry by Babu Prassanna Kumar Banerjee, Assistant Settlement Officer.

‡ Once a centre of salt and rice export. The zamindars in 1832 levied a tax of Rs. 678 on the export of rice alone.

of high position free from all risks of inundation, and sufficient depth of water in immediate proximity to the river bank. Captain Macneil immediately obtained a lease of a small area of land by arrangement with the zamindar.

Subsequently Government, recognising the advantages of the site, acquired an area of 179 acres, which now forms the Chandbali Khas Mahal and includes the lands leased by Captain Macneil. These eventually passed into the hands of the India General Steam Navigation Co. and Messrs. Macneil and Co., to whom the leases were first granted by Government in 1877.

The area held by the two companies now amounts to 12 acres and, besides offices and warehouses, contains a flourishing bazar which occupies one-third of the area. The tenants of the companies pay rents amounting to Rs. 2,500, and the rents payable by the companies under the leases lately granted amount to Rs. 168.

Chandbali lies on the north bank of the Baitarani river some 8 miles west of its confluence with the Brahmani and 20 miles from the mouth. It is connected with the interior by the river Nutai, the Bhadrak road, and various tidal creeks. The river frontage area is small and contains chiefly the companies' warehouses, bazar and lodging houses. At the divergence of the Bhadrak road there is a second bazar and a flourishing market.

Mandhatta is situated on the Coast Canal a short distance above the crossing of the river Haskura. This port has been in existence but a few years, and is of growing importance.

A bazar including a number of stores has been established, and rice and paddy together with a small quantity of *birhi* from Singla market are collected by the merchants for export to Calcutta in country boats by the canal. The total value of the exports amounts to about Rs. 90,000. The imports include the usual items—English cloths, English and Bengali yarn, betelnut, spices, kerosine-oil, potatoes, and turmeric, and the total value amounts to Rs. 70,000.

Baliapal on the river Matia near Karanjaria bungalow affords a trade centre for pargana Ankura and part of *killa* Kanika. The chief export is rice which, to the annual value of a lakh of rupees, is despatched in sloops to Calcutta, Madras, and to the Laccadives and Maldives.

Barbatia on the Gochida river, a tributary of the Subarnarekha, exports rice paddy and mats to Calcutta in country boats by the canal, and also in small sloops by sea. The value of the exports amounts to less than a lakh and the imports include the customary articles, but are chiefly oil and cloths.

Batanga is situated on the Coast Canal some 6 miles north of Bhograi lock and not far from Deula market. Some Bombay merchants have established stores here and export rice, to the value of about half a lakh of rupees, *via* the Coast Canal to Calcutta whence it is sent to Bombay.

Other centres from which a small export trade is carried on, but which are hardly worthy of the name of ports, are Talpada, Inchuri, and other places along the Coast Canal, where, perhaps, a single trader has established himself. At Churakhai, on a tidal creek communicating with the Panchpara river and adjoining the Trunk road 12 miles north of Balasore, is a warehouse belonging to a Contai merchant, whence country boats laden with rice travel down into the Coast Canal and so to Calcutta, returning with oil and other commodities.

A similar centre is Panchrukhi on a tidal creek connecting with the Subarnarekha near Jamkunda. There are two stores here, and rice is exported to Calcutta.

Soils.

69. Lands are ordinarily of three classes—

- (1) *Jala* or rice lands.
- (2) *Pal* or riverside lands enriched with silt deposit. These grow tobacco, cotton, *rabi* crops, and the best paddy.
- (3) *Kala*, the high lands of the homestead, which generally grow vegetables. These are constantly enriched by manure and refuse of all kinds, and are locally known as *bazajasal* or capable of growing every description of crop.

Soils are further distinguished as *Matial*, which includes a large proportion of clay and grows *biaki*, *sarad*, sugarcane, *kulthi*, and other *rabi* crops.

Dorasa, a mixture of clay and sand; grows *biaki* and *sarad* rice, sugarcane, *kulthi*, and other *rabi* crops.

Bukara, sandy soil; grows *sarad* rice.

Chikta Matial, adhesive clay; grows *sarad* rice.

Two further classifications under which all lands fall are—

Dangar, upland soil; grows *sarad*.

Gahir, low land soil; grows *sarad* and *dahua*.

Lands growing *sarad* are generally classed according to their situation. The first class or *aul* includes all soils which retain moisture up to the time when the ear is fully ripe. Homestead and alluvial lands also rank under this class on account of their special fertility.

The second class or *doem* includes the medium level soils which only retain moisture up to September. Inferior and sandy soils rank under the third class or *soem*. There also exists a fourth class, and sometimes a fifth and sixth.

70. Mr. N. N. Banerjee in his report on the Agriculture of Cuttack has given on this subject a quantity of information which is equally applicable to this district, and I shall therefore treat the subject as shortly as possible. Paddy is the principal crop and includes three distinct classes—*sarad*, *biali*, and *dahua*.

Of the 7,76,000 acres of cropped land in the area under settlement of rents no less than 7,08,000 or 91 per cent. are under *sarad* rice. Three descriptions are recognised—*asu* grown on high lands, *kunda* grown on land of mean level, and *garu* grown on low lands. On the higher level the crop is sown broadcast, but in the low lands, especially in parganas Ankura, Bhera, Kaima, and Bayang, it is transplanted because in such parts the water gathers more quickly, and would wash away the seeds or drown the early seedlings. But transplantation is also resorted to for a better crop, since only the strongest seedlings are planted and the better class of raiyats possess *talha* is, plots of good high land, generally within their homestead and specially reserved for growing the paddy for transplantation. A quarter of an acre of *talhati* suffices for the transplantation of four times that area. The transplanted crop is expected to yield from one to five maunds in excess of that sown broadcast.

The sowing is the work of May or June according as the rain is early or late. *Asu* is reaped in August or September, *kunda* in September and October, and *garu* from November to January. The yield is from 10 maunds of paddy to the acre in the unfertile tracts, such as Ambohatta, to 30 maunds in the best riverside lands on the Burabalong below Balasore, on the virgin soil of the reclaimed lands by the Subarnarekha, and in some parts of Ankura. The greater part of the district yields an average of 18 maunds in fair seasons; but taking good and bad lands alike, and with due regard to the floods and drought to which the country is periodically subjected, the average outturn is estimated to be very little more than 15 maunds. Excluding experiments not worthy of credit on the jail lands in the Bazar town, and excluding also those of the Public Works Department which are taken on one twenty-fifth of an acre, and that the best portion of the best field, I found that experimental cuttings gave an average of 20 maunds of paddy and 22 maunds of straw per acre.

Biali rice is grown in small quantities, but in almost every part of the district. The average area under this crop is 5,400 acres or not a hundredth part of that under *sarad*. It is sown upon high lands in the month of May, and reaped in August and September. Being thus an early crop, although the cost of raising it is high and 50 seers of seed are requisite for an acre, it is grown on a portion of his holding by the tenant who has no store of rice or who is being pressed by his landlord for payment of rent. The yield is 10 or 12 maunds of paddy to the acre.

Dahua.—The area shown under this crop is only 800 acres, but varies considerably from year to year. There is little ground suitable for its cultivation, for it requires a low level and facilities for irrigation. Sown, or more commonly transplanted, in December and January, it is harvested in April and May, and the yield is from 8 to 12 maunds. The crop is scarcely grown except in Dhamnagar, Bayang, Senaut, and Bhera in the south of the district, and though the normal area under it is small, it is largely sown after a failure

* See Appendix F. The estimates in this paragraph are Mr. Kingsford's and do not always agree with those in Chapter VI.

of the *sarad* rice. Thus after the drought of 1895 when the *sarad* crop was destroyed, no less than 2,000 acres were put under irrigation from the High Level Canal, and the area irrigated from other sources was probably as great.

Other food-grains grown include *mug*, *birhi*, *kulthi*, *chana*, *arhar*, all of which are pulses, *maka* (maize) and *barguri*, a description of bean, but which may rank as a pulse. The total area under these crops is only 8,000 acres; they are generally grown on twice-cropped lands, and are named in the order of their importance.

Mug is of three kinds—*dhala*, *kala*, and *jai*, the latter being in the greatest demand on account of its superior flavour. It is sown broadcast in August and September and reaped in December and January, the average outturn being from 2½ to 3½ maunds. It is eaten as *dal*.

Birhi is similar to *mug*, and is sown broadcast during the rains.

Kulthi, grown chiefly in Senaut, Randia Orgora, and Dhamnagar is sown in November and cut in February. It is the cheapest of the *rabi* crops, and is commonly eaten as *dal* by the poorer classes.

Chana is sown in August and September and reaped in December. It is eaten as *dal*.

Arhar is sown in June on *ka'a* lands and reaped in December. The plants grow to a considerable height.

Maka is a crop grown in homesteads only. It is sown in July, and in September; the cobs are plucked and eaten fried. It is chiefly produced in Senaut, Kundi, and Sahabunder.

Barguri is very similar to *chana*. It is eaten as *dal* and is also used for the preparation of sweetmeats.

Oilseeds, include mustard (*sarisa*), castor oil (*gaba*) linseed (*tisi*), and sesamum (*til*), and the area covered by these crops is 600 acres. Mustard is sown broadcast on *pal* lands and in homesteads during October and November and reaped in February. It is grown chiefly in Senaut, Sahabunder, Bhograi, Kundi, Phulwar, and Sunhat. Generally a tenant puts only a few *gunths** under this crop, and the yield is about 10 seers per *gunth*. Mustard oil is used for cooking purposes and by the better classes for anointing the body after bathing. Four seers of seed yield one of oil.

The castor oil plant is grown in a similar fashion. It prefers a dry soil, and requires water only when the fruit is ripening. The yield is about 3 maunds per acre, and a maund of seed will yield 10 seers of oil. The oil is cheaper than that of mustard, and is used by the poorer classes for the same purposes.

Spices, including coriander seed, (*dhania* , *joani*,† and aniseed (*panamohure*) cover an area of about 100 acres and are grown on Miscellaneous crops. *pat*lands or in homesteads, being sown broadcast in November and reaped in February.

Sugarcane.—The area is recorded as less than 500 acres, but this figure does not represent actual facts. The crop is chiefly grown in Dhamnagar under irrigation from the High Level Canal, and no less than 500 acres were irrigated this year in the pargana named. The acreage now under sugarcane may be estimated at 700 acres. The two varieties are *kantari* and *bansia*, the former of which gives a better yield. The crop needs careful attention and a plentiful supply of water. The cuttings are planted in rows during January and February, and the crop is reaped in October and November. The cane is crushed in wooden mills worked by oxen, and the process of extracting the *gur* is a wasteful one.

At Bhadrak there are also some fifteen or twenty mills of a more modern make, which are let out to the cultivators. The yield of *gur* is from 25 to 60 maunds per acre, value Rs. 125 to Rs. 300 at Rs. 5 per maund; but the cost of cultivation† is Rs. 60 or Rs. 70 per acre and the crop is therefore not to be grown except by well-to-do raiyats who can afford the expenditure of capital. Moreover, the crop is thought to exhaust the soil, and the same land is not put under cane for more than two consecutive years, after which it lies fallow another year.

* One twenty-fifth of an acre.

† I do not know what the name is.

Mr. Arnott makes it Rs 218.

Cotton and jute cover 200 acres. The latter is grown in small quantities throughout the district, and generally in homestead lands. In the north it is found most frequently on the banks of the Subarnarekha. Of cotton the two varieties are *bara* and *chota*. The former is grown on homestead land and attains a height of 7 or 8 feet, yielding a crop for several years. The latter is grown on riverside lands, the seeds being mixed with cowdung and sown broadcast during November. The harvest is taken during April, and the yield to the acre is about a maund of cleaned cotton which may sell from Rs. 20.

Tobacco is grown upon some 20 acres of riverside lands in Dhamnagar and Senaut, and the yield is said to be 8 maunds, which may be valued at Rs. 160. The cost of cultivation does not exceed Rs. 60 per acre.

Pān, or betel leaf, is grown on 120 acres, chiefly in Bhograī, where, however, the area has decreased since last Settlement. One village, Kalyani, produces the crop in the centre of the district, and some is grown in the neighbourhood of Bhadrak. The plant is a creeper grown on a raised garden, one or two *gunths* in size, carefully fenced in and covered with a thatched roof. About 6,000 plants grow on a garden of two *gunths* and the leaves are thrown out in pairs at regular intervals, about four being plucked from each stem every month.

The leaves sell at an average price of 1,500 per rupee and the value of the yearly outturn is Rs. 190; the expenditure is Rs. 50* and the profit is therefore Rs. 140. The average life of a garden is eighteen years. The cultivation is in the hands of a special caste, the *Baraji* or *Barni* of Bengal.

Inkur covers an area of 100 acres. This is a reed generally found growing on wet lands in the vicinity of *pān* gardens, and is used in thatching the outer fence and as a support for the plant.

Miscellaneous vegetables are largely grown on the homestead lands which cover an area of 41,700 acres. An area of 1,300 acres is shown under *Brinjal*, and other vegetables, include pumpkin (*bokhala*), cucumber (*phuti* and *kukuri*) and melon (*turbaj*).

These are grown most largely in Renna, Phulwar, and Kundi, for the supply of the Balasore market, and in Randia Orgara, Senaut and Dhamnagar, for that of Bhadrak.

CHAPTER IV.

STATISTICAL AND PHYSICAL DESCRIPTION OF THE SADAR SUBDIVISION OF THE PURI DISTRICT.

[This chapter was entirely written by Mr. H. McPherson in 1898-99. Only the figures have been revised.]

71. Puri, the southern district of the Orissa Division, is also the most southerly district of the Bengal Presidency. It lies between 19° 28' and 20° 26' north latitude and between 85° 00' and 86° 30' east longitude. The District is divided by physical feature, historical tradition, and administrative arrangement into two distinct portions. The hill country to the north-west included in the Government estate of Khurda occupies two-fifths of the total area of the district and is known as the Khurda subdivision. The remaining three-fifths of the district known as the Sadar subdivision consists of a deltaic alluvial plain stretching from the base of the Khurda hills to the Bay of Bengal.

The Sadar subdivision is situated between 19° 28' and 20° 22' north latitude and between 85° 12' and 86° 30' east longitude.

Its general shape is triangular. If we take the point where the Bengal and Bombay Presidencies meet on the coast line of the Bay to be the apex of the triangle then the base is the Cuttack boundary, a line 40 miles in length. The shore of the Bay forms the south-eastern and longer side about 90 miles in length, and the north-western and shorter side about 80 miles in length is the Khurda boundary.

Puri town, the head-quarters of the district, stands on the sea-shore about half way down the south-western side of the triangle, at 19° 48' 14" north latitude and 85° 51' 39" east longitude.

* See paragraph 184.

72. The total area of the Puri district is 2,490 square miles. The area of Khurda subdivision is 971 square miles and of the Sadar subdivision 1,528 square miles. The present report is concerned only with the temporarily-settled parganas of the Sadar subdivision. To ascertain the area of this portion it is necessary to exclude from the total the following items:—

				Square miles
I.—Permanently-settled parganas—				
(i) Marichpur	...	...	...	53.29
(ii) Andhari	...	...	...	16.10
(iii) Malud	...	...	...	15.35
(iv) Parikud	...	...	...	67.52
(v) Bajrakote	...	...	...	17.08
(vi) Manikpatna	...	...	...	24.14
II.—Chilka Lake, so far as included in the Sadar subdivision				...
	...	...	...	310.35
III.—Lands of Khurda <i>Killa</i>				...
	...	...	...	42.
Total				546

There remains a balance of 982 square miles. This is not entirely temporarily settled. A large number of villages, portions of villages, and parcels of land are held revenue-free and are altogether excluded from the areas of temporarily-settled estates. The area of these revenue-free lands amounts to 145 square miles.

There are also 10 square miles of permanently-settled tenures within the Kodhar Khas mahals.

Lands occupied by various departments of Government and excluded from revenue-paying estates cover an area of 6 square miles.

If these items be excluded, the area of revenue-paying estates falls to 821 square miles* though the revenue returns show only 818 square miles temporarily settled.

Puri estates have lands in Cuttack district and some Cuttack estates have lands in the Puri district. For the former an addition of 5 square miles, and for the latter a deduction of 5 square miles, has to be made, so that no change is made in the temporarily-settled area.

73. There are two recognised divisions of the Sadar Subdivision—the first Magisterial by Thanas, and the second Collectorate by Parganas. The former was originally made for purposes of Police administration, whereas the Pargana was the old fiscal division obtaining from the days of the Hindu Rajas. It is now proposed in Orissa, as in Bihar, to extend the application of the Thana and to make it the general unit for all administrative work. The Pargana Division will subsist only in certain estate registers and records for which an arrangement by Parganas appears to be indispensable. Puri is divided into three Thanas, viz, Gope, Pipli, and Puri, and into 24 Parganas. The areas of the Thanas are respectively:—

				Sq. miles.
Gope	...	...	...	339
Pipli	...	...	...	331
Puri	...	...	...	858
Total				1,528

This total includes 42 square miles of the Khurda Subdivision, which for Police purposes, is included in Thanas of the Sadar Subdivision.

* For explanation, see Chap. XXI.

The following is a statement of the areas of Parganas arranged alphabetically:—

Name of Pargana.	Area in sq. miles.	Name of Pargana.	Area in sq. miles.
Andhari ...	16.10	Total brought forward	579.22
Antrodh ...	53.20	Kurelo	20.18
Astrang ...	8.97	Lembai	85.86
Athaisi ...	52.13	Malud	15.35
Bajrakot ...	17.08	Manikpatna	24.14
Banchas ...	30.33	Matkatpatna	10.48
Chaubiskud ...	100.32	Merichpur	53.29
Damarkhand ...	29.49	Oldhar	41.12
Kanman (Tappa) ...	6.50	Parikud	67.52
Khodar ...	27.46	Paschimduai	26.01
Kotdes ...	182.08	Purbaduai	32.63
Kotrahang ...	55.56	Rahang	150.34
Total carried forward ...	579.22	Serai	67.32
		Total	1,177.46

The Pargana and Thana totals do not tally, because Thanas Pipli and Puri both include detached portions of Khurda Subdivision, and Thana Puri in addition comprises a large expanse of the Chilka Lake, which is not included in any Pargana.

It will be seen from the above figures that Thanas Gope and Pipli are of nearly equal size and are much smaller than Thana Puri, but the latter includes, besides the Chilka Lake, Puri town, for which there are separate Police arrangements. Puri town is comprised in 16 survey villages, and has an area of 2.92 square miles. If the town and the Chika be excluded from the Sadar Thana, then we have for its true dimensions an area of 5.45 square miles with 786 villages. Even so reduced, it is much larger than either of the other two Thanas.

Of the Parganas, Kotdes is the largest, with an area of 182 square miles, and Tappa Kanman, the smallest, with an area of 6.50 square miles. The average size of the Pargana is 49 square miles.

74. There are 2,145 villages in the Sadar Subdivision, grouped as follows under their respective Parganas and Thanas.

Division into villages.

The area of the Parganas in acres and the average size of a village in each Pargana have been added:—

Name of Pargana.	Area in sq. miles.	No. of villages.	Average area of village in acres.
P. Andhari ...	16.10	18	572
Antrodh ...	53.20	127	268
Astrang ...	8.97	16	359
Athaisi ...	52.13	70	477
P. Bajrakot ...	17.08	21	521
Banchas ...	30.33	58	335
Chaubiskud ...	100.32	180	867
Damarkhand ...	29.49	74	255
Kanman (Tappa) ...	6.50	18	231
Khodar ...	27.46	45	391
Kotdes ...	182.08	355	326
Kotrahang ...	55.56	190	187
Kurelo ...	20.18	52	248
Lembui ...	89.86	234	246
P. Malud ...	15.35	10	982
P. Manikpatna ...	24.14	12	1,288
Matkatpatna ...	10.48	8	839
P. Marichpur ...	53.29	56	609
Oldhar ...	41.12	49	537
P. Parikud ...	67.52	61	720
Paschimduai ...	26.01	62	269
Purbaduai { Puri town	2.92	16	...
{ Rest of Pargana	32.63	73	286
Rahang ...	147.42	236	400
Serai ...	67.32	104	414
Total	1,177.46	2,145	351

The Parganas marked P(p) are the permanently-settled Parganas. A similar statement to the above is given *Thanawar* (including detached villages of Khurda, excluding Chilka Lake):—

Name of Thana.	Area in sq. miles.	No. of villages.	Average area of village in acres.
Gope	339	614	353
Pipli	331	794	264
Puri { Town	2.90	16	118
{ Rest of Thana	5.45	786	443
Total	1,218	2,210	351

These figures show that in the District as a whole there are nearly two villages to every square mile of country. Kotrahang is more thickly studded with villages than any other Pargana. The permanently-settled Parganas are the most sparsely populated, as they all comprise large unculturable areas of river, marsh, and shore sand.

75. At the beginning of last Settlement there were 263 temporarily-settled estates in the Subdivision. Their number has been increased by partition in the course of the Settlement to 475. The distribution of estates by Parganas according to the Collectorate registers is as follows:—

Name of Pargana.	Number of estates at last Settlement.	Number of estates at present.
Antrodh ...	3	5
Astrang ...	1	1
Athaisi ...	7	14
Banchas ...	18	41
Chaubiskud	13	16
Damarkhand	13	16
Kanman (Tappa)	2	2
Khodar ...	2	3
Kotdes ...	16	35
Kotrahang	50	78
Kurelo ...	8	8
Lombai ...	7	7
Masrud ...	3	3
Oldhar ...	16	21
Paschimduai	36	109
Purbaduai	31	64
Rahang ...	21	22
Serai ...	8	8
Sultannager ...	1	3
Saidabad ...	7	19
Total	263	474

Partitions have been most numerous in Paschimduai, Purbaduai and Kotrahang. In these Parganas the process of subdivision has been carried to such a ridiculous extent that prior to re-settlement they contained 57 estates paying less than Rs. 10 of Revenue and three paying less than Re. 1.

A limit to the partition of temporarily-settled estates of the nature of that provided in Section 11 of the old Partition Act VIII (B.C.) of 1876 for permanently-settled estates has been provided for all revenue-paying estates in Section 11 of the new Act V (B.C.) of 1897.

Allowances were originally granted to zamindars on the theory that they relieved the State of the trouble, expense, and risk of collecting the small sums payable by individual raiyats. When by excessive partition the amount payable by the zamindar becomes less than the amount realisable from the average raiyat, the State gets no *quid pro quo* for the allowance it makes to the zamindar. This has been recognised in the new Act, and the line has been drawn at Rs. 10.

76. The extent to which estates differ in size may be judged from the fact that the largest estate in the District, viz., Kotdes, tauzi No. 44, paid before re-settlement a revenue of Rs. 81,082 and the smallest, viz., Salpuradang, tauzi No. 479, a revenue of Rs. 14.

A classification of estates by former revenue yields the following results:—

Rs.	Rs.	No. of estates.	Rs.	Rs.	No. of estates.
1 to	10	64	1,000 to	5,000	31
11 to	50	131	5,000 to	10,000	1
50 to	100	75	10,000 and over		
100 to	1,000	177			

The average amount of revenue was Rs. 604 per estate, the estates which paid a revenue exceeding Rs. 2,500 may be especially mentioned; they are given in order of magnitude:—

	Rs.	
Kotdes, tauzi No. 44 ..	81,288	Kotdes and Antrodh Pargana.
Delang, tauzi No. 257 ..	33,754	Lembai Pargana.
*Rahang, tauzi No. 268 ..	26,895	Rahang "
*Krishnanagar, tauzi No. 270 ..	19,583	Serai "
*Krishnachander, tauzi No. 270 ..	12,661	Chaubiskud "
Kotsahi, tauzi No. 61	5,392	} Kotrahang "
Pipli, tauzi No. 62	4,523	
Khodar, tauzi No. 251	4,189	Khodar Pargana (a Government estate).
Killa Kokal, tauzi No. 421	4,163	} Chaubiskud ditto.
Killa Rovang, tauzi No. 130	3,383	
Killa Gobra, tauzi No. 189	2,514	Athaisi ditto.

The three estates marked with an asterisk were, during the late Settlement, held *khás* on account of the recusancy of the proprietors. The amount shown against them represents the average net income derived from them by Government over a series of eleven years.

77. The information that has been given above has reference to the old *jamas* payable by estates previous to the present revision of Settlement.

In writing the assessment reports of the new Settlement it has been found convenient to adopt an arrangement which differs slightly from the *Parganawar* arrangement obtaining in the last Settlement.

In the first place what may be called the obsolete or paper Parganas—Mahal Musrud, Saidabad, and Sultannagar—have been discarded. These were not territorial divisions of the District, but merely names given to small detached areas scattered over numerous Parganas and included within the bounds of certain estates. In some cases they extend to the adjoining district of Cuttack. They have never been recognised as territorial units by the Survey Department either at last or the present Settlement, and their areas have always been included within the Parganas to which they geographically belong.

In the next place, it has been found convenient in a few cases to group together and re-arrange Parganas because they have possessed some important feature in common. The new divisions have been styled "Blocks," and are as follows:—

Name of Block.	Parganas included.	Reason for arrangement.
Kotdes	... Kotdes Antrodh	Because more or less conterminous with Kotdes estate, tauzi, No. 44.
Khodar	... Khodar Kurelo Kanman (Tappa) Astrung	Because alike liable to inundation from the Dobi and Prachi rivers.
East Athaisi and Damarkhand.	East Athaisi and Damarkhand.	Because more or less conterminous with Killa Gobra, and alike liable to inundation from the Prachi and Kadua rivers.
West Athaisi and Matkatpatna.	West Athaisi Matkatpatna.	Because alike liable to inundation from the Kushbhadra rivers.
Lembai	Lembai	... Single Pargana.
Kotrahang	Kotrahang	... Ditto.
Paschimduai	Paschimduai	... Ditto.
Purbaduai Oldhar	Purbaduai (include Oldhar, portion of Matkatpatna and Athaisi.)	Because alike liable to inundation from the Bhargabi (Adlabad breach), the Dhauna and Kushbhadra river.
Rahang	Rahang	... Single Pargana.
Serai ...	Serai ...	... Ditto.
Chaubiskud	Chaubiskud	... Ditto.
Banchas	Banchas	... Ditto.

To these have been added the miscellaneous items—Scattered estates.
The distribution of estates over blocks is as follows:—

Block.	No. of estates.	Area in acres (fractions omitted)
1. Kotdes ...	39	1,33,300
2. Kodhar ...	14	25,900
3. East Athaisi and Damarkhand ...	26	39,000
4. West Athaisi and Matkatpatna ...	10	16,800
5. Lembai ...	7	53,100
6. Kotrahang ...	78	28,600
7. Paschimduai ...	109	12,500
8. Purbaduai Oldhar ...	87	31,700
9. Rahang ...	22	68,800
10. Serai ...	9	40,300
11. Chaubiskud ...	16	56,600
12. Banchas ...	41	12,700
13. Scattered estates ...	27	14,600
Total ...	485	5,23,300

The average size of an estate is 1,079 acres. But the largest, Kotdes, has an area of 1,10,562 acres; and the smallest, Kharidagi Mahura, tauzi No. 487, an area of 43 acres. Under the new settlement the classification of estates by revenue will be—

Rs.	No. of estates.	Rs.	No. of estates.
1 to 10 ...	46	1,000 to 5,000 ...	37
10 to 50 ...	106	5,000 to 10,000 ...	2
51 to 100 ...	78	10,000 to 1,00,000 ...	4
100 to 1,000 ...	211	Over Rs. 1,00,000 ...	1

The variations in revenue will be from Rs. 1,04,324 (Kotdes) to Re. 1-2 and the average amount of revenue per estate Rs. 777.

78. To ascertain the average sizes of a holding and of a plot two different sets of figures must be considered.

Division into Holdings and Plots.

As the number of revenue-free holdings and plots cannot be separated out from the number of revenue-paying without an amount of trouble incommensurate with the object, the average size of a holding may be ascertained by dividing the total assessed area by the total number of holdings according to the Settlement reports, while the average size of a plot may be ascertained by dividing the total area of the temporarily-settled Parganas by the total area of plots according to Survey records. The figures so ascertained are—

Total assessed area ...	3,73,300
Total number of holdings ...	2,04,400
Average size of holdings ...	1.8 acres.

Name of pargana	Total area in acres.	Total cultivated area in acres.	Total number of plots.	Average size of plot 3+5.	Average size of plot 4+5
1. Antrodh ...	34,054	26,909	98,084	0.34	0.27
2. Astrang ...	5,743	2,839	7,625	0.75	0.37
3. Athaisi ...	33,363	12,893	42,116	0.79	0.30
4. Banchas ...	19,413	14,804	50,051	0.38	0.29
5. Chaubiskud ...	64,207	37,471	90,236	0.71	0.41
6. Damarkhand ...	18,876	13,012	38,450	0.49	0.33
7. Kanman Tappa ...	4,163	2,335	7,354	0.56	0.31
8. Kodhar ...	17,579	12,215	50,759	0.34	0.21
9. Kotdes ...	116,325	92,504	404,724	0.29	0.22
10. Kotrahang ...	35,560	29,246	120,601	0.29	0.24
11. Kurelo ...	12,916	8,081	26,309	0.49	0.30
12. Lembai ...	57,597	45,184	162,766	0.35	0.27
13. Matkatpatna ...	6,709	2,382	7,453	0.90	0.31
14. Oldhar ...	26,319	12,195	28,117	0.93	0.43
15. Paschimduai ...	16,650	13,642	55,184	0.30	0.24
16. Purbaduai ...	20,888	16,559	45,959	0.45	0.36
17. Rahang ...	96,097	73,992	210,840	0.45	0.35
18. Serai ...	43,091	32,526	75,313	0.57	0.43
Total ...	6,29,550	4,48,789	15,21,891	0.41	0.29

An alternative figure for size of plot has been given, the first inclusive and the second exclusive of the uncultivated area. The number of uncultivated plots is comparatively small, though the area is considerable. It would be difficult to separate out the number without elaborate examination of the records, and as it bears only a very small portion to the total number, its inclusion does not much affect the value of the average.

It would appear from the above figures that the average holding comprises seven plots. The average village being 351 acres in extent, will comprise on the average 92 holdings and 689 plots.

79. The Sadar Subdivision of the Puri District is the south-western section of the Mahanadi delta. It is flanked on the west by the hill country of Khurda, a continuation of the low ranges which separate the Native States of Nayagarh, Khandpara, and Rampur from the valley of the Mahanadi. The boundary between the Sadar and Khurda Subdivision is a well-defined line running close to the foot of the hills and occupied by the Kawakhai and Daya channels. The valley of the Daya is crossed by the hills at two points only—at Dhaulagiri, an isolated peak standing in a detached village of Khurda in North Kotrahang below the bifurcation of the Daya and Bhargabi; and at Jagdalpur, where there is a line of low hills intersected by the new Puri Branch Railway. The highest peak in this range, rising behind the Jagdalpur bungalow and crowned by an ancient Hindu Temple, is about 500 feet above sea level. Dhaulagiri, famous for the *Asoka* inscription carved on a great slab of living rock near its base, is about the same height.

The Sadar Subdivision crosses the Daya at two places only—in North-west Lembai, where it encroaches on the Khurda uplands and encloses the small hills of Kanbagpura Anragarh; and again in West Serai, where it diverges from the river for a distance of 2 to 5 miles and encloses some high land and rocky mounds in Garh Sanput.

With these trifling exceptions, the Sadar Subdivision is alluvial deltaic country, stretching without break from the Eastern Ghâts to the Bay of Bengal.

The main portion of the delta is contained between the channels of the Daya on the west and of the Kushbhadra on the east. Beyond the Kushbhadra valley is a tract of high inferior land where cultivation is varied by stretches of moorland interspersed with patches of forest and scrub jungle. This higher belt forms the watershed between the southern Cuttack and Puri section of the Mahanadi delta. It stretches from the head of the Sadar Subdivision in North Kotdes through Parganas Antrodh, Damarband, Banchas, and the Kodhar block to the marshes of *killa* Marichpur. The Katjuri through its chief offshoot the Devi finds an outlet to the sea in *killa* Marichpur through a network of creeks.

In the delta proper lying between the Daya and the Kushbhadra three more or less distinct areas may be distinguished. The Parganas at its head—Kotdes, Kotrahang, and Lembai—are marked by considerable diversity of level. The higher lands are occupied by small patches of forest, by extensive mango, jack, and *palang* groves, and by village sites concealed from view in the foliage of *banyan*, tamarind, and other umbrageous trees. Rice lands of varied levels fill up the intervals. The whole combines to form a pleasing picture, and the eye is nowhere wearied by dull flat expanses of plain country stretching unbroken to the horizon.

As we proceed further south we come to the second zone of the delta. There is here less diversity of level. Woodland scenery is rarer. The village sites are more exposed, and clusters of cocoanut, palmyra, and date palms take the place of the more leafy groves of the north. The only breaks in the monotony of the landscape are caused by the large rivers whose banks are fringed with trees and undergrowth. Parganas Athaisi, Purbaduai, Oldhar, Paschimduai, Rahang, Chaubiskud and Serai lie within this second zone. In the southern extremities of these Parganas where we approach the third zone the aspect of the country is dreary beyond description. The land is flat as the surface of a table; it is only a few feet above sea level, and is mostly subject to river flood which converts whole tracts by turn into inland seas or marshy swamps. The village sites are huddled on the top of isolated mounds, some provided by nature, others constructed or developed by art. The trees, if any, round the homesteads, are seldom more than a group of palms, so few that they can be counted on one's fingers.

The last zone is the area lying beyond the line of cultivation. On the south-east it is a belt of sand along the sea-coast varying from 1 to 4 miles in breadth; on the south-west it is the great expanse of water called the Chilka Lake. Along the coast is a line of sand hills which the rivers of the delta find it difficult to pierce. The Kushbhadra on the east finds an obstructed outlet to the sea; but the Bhargabi, after flowing due south for nearly 50 miles, finds it can make no headway through the shore sand, throwing off some of its volume into the Sar Lake and the Samang Pat, two shallow lagoons to the east and north of Puri town, then turns abruptly to the west and makes its way to the Chilka.

80. The Chilka Lake occupies about one-fifth of the total area of the Sadar subdivision. It is the great basin into which the rivers of the southern delta empty themselves.

The Chilka Lake.

On the west it is flanked by the Kluurda hills. On the east it is divided from the sea by a belt of sand and a group of low islands formed by silt deposit. A small opening of two or three hundred yards connects its waters with the sea and admits the tide. The lake is fresh in the rains and salt in the hot weather. The depth varies from a few inches to a few feet, and its area fluctuates with the season, with the intensity and duration of the annual river floods, and with the ebb and flow of the tide. The normal area of the portion included in the Puri District may be taken to be 310 square miles and the average depth about 4 feet. An ornate description of the lake and its scenery may be found on pages 22 to 25 of Sir W. W. Hunter's "Statistical Account of Puri" and in volume I of the same author's "Orissa."

81. Save in the west, where the Subdivision encroaches on the laterite uplands of Khurda and on the south and east, where the shore sand forms a belt of varying width, the

The Soil.

soil of the Subdivision is of the normal alluvial type found in deltaic country. There is every variety of admixture from almost pure sand to almost pure mud. Generally speaking, the lighter soils, the sandy loams, are most abundant in the north of the District, where there is much diversity of level. The black soils are found more widely in the lower levels of the southern Parganas.

There are several native classifications of soils, as viewed from different points of view. Perhaps the most general is the division into—

Pal land, the riverside silt-enriched soils on which miscellaneous crops of tobacco, sugarcane, *arhar*, *kulthi*, etc., are grown, and

Jal land, the ordinary rice lands within the embankments.

In the *ruidat* of Purgana Rahang soils are divided into the following classes, which may be taken as typical:—

- (1) *Diha*, homestead land (including the garden as well as the house site).
- (2) *Kala* (black land) lying below the village site; the land over which the washing water of the village is poured and all village refuse is thrown.
- (3) *Gora* (light-coloured land), the ordinary crop land.
- (4) *Nadipatu* (river clay), the land on the river bank enriched by alluvial deposit. (*cf.* *Pal* land above).
- (5) *Sarpatu* (watery land), as for example in the *dalua* tracts of the Sar Lake and the Samang Pat.

There are numerous names again for the different varieties of ordinary crop land according to composition, colour and other peculiarities. I have found the following names in use:—

Balichar.—Pure sand out of cultivation.

Balia or *Baliara*.—Sandy soil just fit for cultivation.

Balia matal.—Sandy loam, the most common of all soils and varying much in composition and fertility.

Goria matal.—Soil mixed with pebbles and small stones, usually high land recently reclaimed.

Dudhia matal (milk coloured).—White soil, very friable and fairly fertile; grows fine paddy.

Telia matal.—A damp clay soil with an oily appearance; fairly common and not unfertile.

Sudh matal.—Purely muddy soil.

Chaulia matal.—Brownish soil, very friable; common and fairly fertile.

Pansia matal.—Ash-coloured soil, not uncommon and also fertile; very friable.

Kimbharia matal.—Slate (crocodile)-coloured soil; something like the preceding.

Telia balia.—Intermediate between *balia matal* and *telia matal*.

Dhaulia matal.—Greyish-white soil. } Called from their colours, which
Nalia matal.—Red soil. } are due to peculiarities of local
Haldia matal.—Yellow soil. } origin; usually fertile.

Janha matal.—An inferior variety of *chaulia matal*.

Hadua matal.—Coloured like bone, and of hard consistency.

Khulthi matal or *Khari matal.*—A chalky soil; fairly fertile.

Chikta matal.—Sticky, muddy soil; often found in the bottom of tanks.

Kala matal.—Black soil, usually of low levels; the most fertile of all (to be distinguished from *kala mati*—the land round the village site).

Nunia matal.—A soil which from some peculiarity of composition becomes saltish in the hot weather. It abounds near the Chilka. The subsoil I suppose gets affected and the saline impregnation gradually pervades the upper soil and gives it a bluish-white appearance.

Nunia (called *nuni char* while out of cultivation), soil which has been inundated with salt water and has not recovered; may or may not be in cultivation. This is also common in the Chilka side villages.

82. When village notes were compiled in camp, raiyats used to be asked to give estimates of the produce of different soils.

Fertility of Soils. These estimates were anything but correct, and always fell much short of the truth. They varied considerably from village to village. I give, for what it is worth, a table which shows for each class the number of times it is mentioned in the village notes and the average produce assigned by the raiyats.

CLASS OF SOILS.				Number of times mentioned.	Average produce in <i>gownies</i> = 46 seers of 80 talabs.
Balia or Balarra	...	...	...	4	57
Balia Matal	...	...	...	74	95
Goria Do.	...	...	...	1	30
Dudhia Do.	...	...	...	7	83
Telia Do.	...	...	...	11	85
Sudh Do.	...	...	...	25	106
Chaulia Do.	...	...	...	53	95
Pansia Do.	...	...	...	12	100
Kimbharia Do.	...	...	...	5	88
Telia Do.	...	...	...	5	70
Dhaulia Do.	...	...	...	5	110
Nalia Do.	...	...	...	9	132
Haldia Do.	...	...	...	4	115
Janha Do.	...	...	...	3	90
Hadua Do.	...	...	...	1	120
Khalli Do.	...	...	...	1	80
Chikta Do.	...	...	...	3	90
Kala Do.	...	...	...	19	161
Nunia Do.	...	...	...	15	66
Nunia	...	...	...	5	80

The average for 262 entries comes to 98.7 *gownies*—454 standard seers. This is of course an understatement; an addition of 50 per cent. at least would be required to make the estimates an approach to truth.

83. The range of hills which separate the Native States and the Puri District from the southern valley of the Mahanadi is pierced by that river at Naraj, a village 7 miles about Cuttack town and about 10 miles from the northern angle of the Sadar River System.

Subdivision of Puri. The Mahanadi, after emerging from the Naraj gorge, throws off to the south one of its chief affluents, the Katjuri, which in its main stream is the principal drainage channel of southern Cuttack. The Katjuri, opposite the town of Cuttack and only a mile or two below the point where it leaves the Mahanadi, is tapped by the Kawakhai which is the head stream of the Puri section of the delta. It has three main distributaries; at Baliana, about 12 miles from its head; it sends off the Kusabhadra to the left, and at Sadaipur 7 miles lower down, it divides into the Bhargabi continuing south, and the Daya inclining to the south-west. The most easterly of the three rivers, the Kushbhadra, makes its way by a more or less direct line to the sea and forces a sluggish passage through the shore sand about half way between Puri town and the mouth of the Debi river, under which name the parent stream the Katjuri finds an outlet into the Bay. The most westerly of the three distributaries, the Daya, follows more or less closely the base of the Khurda hills and enters the Chilka Lake at its north-east end. The Bhargabi, the central stream of the Puri delta, flows almost due south in the direction of Puri town, and finding itself checked by the shore sand, curves rapidly to the west and seeks the Chilka, into which it discharges itself by a network of channels, some of them linked with the Daya.

84. The remaining rivers of the District are either tributaries and
 North-eastern Rivers. affluents of the three main streams, or local drainage channels. Beginning from the east corner of the

District, the following names may be noted. *Killa* Marichpur is drained by the Debi and its offshoots the Gadokont, the Magranal and Kotai rivers. The Prachi carries down to the sea the drainage of the border country between the two districts. It is joined at its mouth by the Kadua, another local stream which flows midway between the Prachi and Kushbhadra basins. The Kadua and the Prachi enter the sea between the two Parganas Athaisi and Kurlo. The Kushbhadra receives no important contributions from the east: but on the west at a point 6 miles from the sea, it receives the whole of the drainage of the Parganas lying between its own and the Bhargabi channels. The Dhanua, with its sub-tributary the Mugai, conveys this large addition of volume to the Kushbhadra, and the point of junction is said to be the lowest point in the delta. The distance of this point from the sea by a direct line is only 6 miles, but, as the fall is very gradual, the river adopts a winding course and does not reach its destination till it has covered twice that distance. There is a constant struggle at the Kushbhadra mouth between the river current and the tide. The struggle has resulted in the formation of a sandy bar which effectively checks the river discharge in time of heavy flood.

85. The Bhargabi, which is heavily embanked throughout, receives no
 Southern Rivers. tributaries of any note from the point of bifurcation at Sadaipur to its turning point north of Puri

town. On the other hand it gives off some, its volume to the Sar Lake by the Bengai and Kanchi *nalas*, and to the Samang *Pat* north of Puri by the Dhauria, East Kania, and Athara *nalas*. The excess spill water of these escape basins is carried by the Harichandan or Suna Mahi river through the sand in a line parallel to the sea front for a distance of nearly 20 miles, when it enters the Chilka near the Chilka mouth. About 10 miles from Puri this channel was joined by a small stream from the north called the "Naya nadi" or "Mew." This small stream was, some forty years ago, artificially connected with the main stream of the Bhargabi, and now as the "Naya nadi" is one of the escape channels of the great river. The Bhargabi after turning to the west thus gives off two affluents to the south-east, viz., the East Kania and the "Naya nadi." The rest of its progress is westward and north-westward towards the Chilka. It sends one offshoot, the South Kania, due west to the Chilka. The main stream then turns north and receives the Rathanchira, a tributary which conveys to it the drainage of the south-eastern half of the country between the Bhargabi and the Daya. Its course is again deflected west, and a network of channels carry its waters to the Chilka at the very point where the Daya enters the lake. The country between the two rivers Bhargabi and Daya has two chief drainage channels, the Rathanchira on the south and east, and the Nún on the north and west. The Rathanchira as remarked above joins the Bhargabi. The main stream of the Nún enters the Daya a few miles above its mouth, but it

has numerous independent creeks connecting it direct with the Chilka. On its left bank the Daya receives several hill streams running down from the uplands of Khurda. The chief of these is the Gangua on the north and the Madagui on the south. The Gangua enters about the 10th mile, and the Madagui about the 28th.

86. All the rivers of the District have one characteristic in common. In the hot weather they are beds of sand with tiny streams or none at all, while in the rains they receive more water than they can carry. This is only the common experience of an Indian river. The particular evils that result in the Puri District will be discussed in a subsequent section of the report.

In Mr. Taylor's report of 1871 on the Orissa Embankments are two statements that show at a glance the distribution of the deltaic rivers, and of the local drainages in the District; and though prepared nearly thirty years ago they give an accurate description of the present order of things.


87. The rivers of the District have from time immemorial been restrained within embankments, and the cultivated lands have been in a more or less efficient degree protected from the disastrous effects of inundation. Before attempting to draw parallels with former times, I will endeavour to give a brief description of the embankments as they exist at present. They are shown on map No. V to understand which it is necessary to know the recognised distribution under the following four classes :—

Class I.—Canal embankments which are intended to be above high flood level marked 0000. (There are none of these in the Puri District).

Class II.—Agricultural embankments mostly above present high flood level which will probably be permanently maintained at their present height; marked 0-0-0-0

Class III.—Embankments which eventually it will probably be desirable to abandon, but which it is proposed to retain for the present; marked □-□-□-□

Class IV.—Embankments which it is undesirable to retain, as in some cases they are actually harmful and the remainder are of doubtful utility; marked ♦♦♦♦

Zamindari and abandoned Government embankments used to be shown in the maps by a zig-zag line thus  and classed V, but they have, by recent orders, been expunged from our records and need not be referred to.

It will be seen from the map that only the three principal rivers into which the Kawakhai breaks up, viz., the Daya, the Bhargabi, and the Kushbhadra, are embanked. The Kawakhai has on its right bank a Class IV embankment which is continued for a few miles along the Daya. The embankment is not in good repair and no serious attempt is made to maintain it. For the rest of its course on the right bank the Daya is devoid of embankments. The Kawakhai on its left bank is defended by a Class II embankment up to Baliana, where the Kushbhadra takes off, and by the Pilgrim road which acts as a Class II embankment from Baliana to Sadaipur where the second bifurcation occurs. The Daya left has a Class II embankment from the point of bifurcation to within a few miles of the Chilka. The Bhargabi is defended on its right bank by a Class II embankment continuous from its parting with the Daya to a point a few miles from the Chilka. On the left the embankment is of Class III. Its line is first broken by the unrepaired Adlabad breach in the 6th mile. From Gabkand to the opening of the Kanchi river the embankment is of Class IV. Then follows a series of escape channels and openings near the westward curve of the Bhargabi. Three tracts of country enclosed by these escapes are protected by ring embankments of Class III. The largest is surrounded by the Bhargabi, the East Kania, the "Naya nadi" and the Harchandi river, forming an oblong about 15 square miles in extent. The rest of the left bank of the Bhargabi and its affluent the South Kania is embanked by Class III *bunds* to within a few miles of the Chilka. The last few miles both on the Daya and the Bhargabi are left open because in flood-time there is always a heavy backwater from the Chilka, and embankments are useless.

Class IV, and a small stretch of Class III, embankments are shown along the north shore of the Sar Lake and the course of the Bengai river, but they have not been repaired for several years, and under present conditions are useless for the protection of the country lying to the north and east.

The Kushbhadra has a Class II embankment for 6 miles down the right bank, and a Class IV embankment not repaired and not continuous for 12 miles down the left bank.

It has been stated in a previous paragraph of the report that the Debi river, an affluent of the Katjuri, enters the District in the extreme north-west corner. There is a short length of combined Class IV and Class III embankment along the right bank at the place where it skirts Kodhar Pargana. This is breached in many places, and it has been proposed, if not already decided, to leave it in disrepair.

From the above it will be seen that the present policy of Government is to effectively protect the large central tract lying between the Daya and Kushbhadra channels, and to leave the rest of the District to take its chance. The tract to the west of the Daya and to the east of the Kushbhadra are practically unprotected. The mid tract between the Kushbhadra and the Bhargabi is one only partially protected in the northern half. In the southern half it is exposed to the mercy of the annual floods.

A list of the existing Class II, III, IV, and of the abandoned Class V, embankments taken from the records of the Public Works Department forms Appendix G to this report. From this it will be seen that the distribution by classes is as follows:—

Class.		Miles.	Feet.	
II	...	97	1,336	To be retained permanently.
III	...	113	3,494	To be retained temporarily.
IV	...	46	1,790	Probably to be abandoned.
V	...	62	1,405	Already abandoned.

The total length of the existing embankments (Class V excluded) is 257 miles 1,250 feet.

As it was only a few years ago that the present policy of abandoning embankments supposed to be useless or injurious was inaugurated, it would have been interesting to contrast the average cost of maintenance before and after, but I have not been able to get the figures necessary for comparison.

In 1896-97 it appears that 257 miles 1,340 feet of Puri embankments were maintained at a cost of Rs. 35,792 or Rs. 139 per square mile as against an average cost of Rs. 217 per mile in Cuttack and Rs. 182 per mile at Balasore. (See Government Resolution No. 209 I. D., dated the 18th February 1898).

With this we may compare the statements found in the statistical account of Puri that the total length of embankments in 1866 was 316½ miles with 43 sluices, maintained at an annual cost of £7 16s. or Rs. 156 per mile; that is, at a total cost of Rs. 49,413.

The figures of a single year taken at random do not however convey much information. In 1896 there were heavy breaches, which swelled the bill of costs.

It has not yet been decided definitely what will be the ultimate fate of the embankments of Class IV. From the revenue point of view, I do not think that it would be judicious to abandon those on the Kushbhadra left, on the Bhargabi left, on the Bengai and on the Sar Lake. But the embankments on the Bengai, the Bhargabi left, and the Sar are more or less useless if the Adlabad Gap remains open. If then it is decided to leave the Adlabad Gap *in statu quo*, there is not much to be gained by maintaining the others.

88. The volume of water poured into the Puri District by the Kawakhai

Channel varies enormously from year to year. The carrying capacity of the embanked channels that conduct this water to the Chilka and the sea varies also with the distance from the head of the delta. To properly appreciate the condition of the problem we want to know first what is the estimated discharge from the Katjuri into the Kawakhai in years of high flood. We then want to know the carrying capacity of the distributaries of the Kawakhai at various distance from the head of the system. Distances of 25 and 40 or 50

Effects of Floods on Embankments.

miles would supply data from which could be estimated the effect of floods on the upper and lower sections of the District, respectively. The Superintending Engineer of the Orissa Circle has kindly given me some notes from which it appears that the estimated discharge of the Kawakhai at head in the exceptionally high flood of 1842 was computed to be 334,483 cubic feet per second, and that the high flood discharge may in future be estimated at 277,180 cubic feet per second.

In a report made by Major Harris in 1858 the discharge capacities of the Kawakhai distributaries at a point 25 miles from Cuttack were estimated as follows :—

					Cubic feet per second.
Daya	...	...	...	...	33,100
Bhargabi	...	...	...	...	59,220
Kushbhadra	...	...	...	...	9,853
Total					102,173

After the flood of 1872 it was estimated that in their lower reaches these rivers could only discharge 45,000 cubic feet per second. It is evident, then that even in a year of very ordinary flood when the discharge is, let us say, only half of the high flood discharge, the Puri rivers are unable to contain within their banks the volume of water passed into the District through the Kawakhai even within the first 25 miles; there must be a discharge of the excess. Under present conditions the spill in ordinary years occurs over the right bank of the Daya, through the Adlabad breach in the Bhargabi left, and over both banks of the Kushbhadra about 20 miles below Cuttack. The relief thus afforded prevents breaching of the embankments lower down.

As regards the phenomena to be witnessed in exceptional years we have ample evidence in the flood reports of 1892 and 1896.

The flood of 1892 was remarkable for its intensity, and that of 1896 for its duration. In 1892 the most serious breaches that occurred in the important embankments of the Daya, Bhargabi, and Kushbhadra were the following :—

On the Daya Left (Class II) at Madhopur in the 8th mile.

On the Bhargabi Right (Class II), none serious. Left (Class III.), at Adlabad in the 6th mile; Gabkand in the 23rd mile.

On the Kushbhadra Left (Class II), at Jogisahi in the 1st mile.

These breaches occurred at places that are always weak points in the embankments. The breaches in the Daya left are caused by the return to that river of the great volume of water escaping across the Class IV embankments of the Kawakhai and Daya right bank. The flood water takes the direction of the Gangua Nala and returning to the river at a point where the channel is contracted, impinges on the left embankment almost at right angles. After breaching the embankment and the Puri-Khurda Road, the water makes its way across Lembai Pargana. Some of its volume returns to the Daya south of the Jagdulpur hills and again imperils the embankment. The rest seeks the Chilka through the channel of the Nūn river. The left embankment of the Daya has not only to withstand the volume of this returning flood water; it is also endangered by the flood poured against it by the Mandagine, a tributary which in addition to its own volume receives by a sub-tributary called the Rajna much of the flood that has spread over the west Daya tract. Breaches in the lower left embankment of the Daya are thus inevitable in years of heavy floods.

The Bhargabi right (Class II) is the most efficient of the district embankments, probably because on account of the breaching of the opposite bank and the relief so afforded to the river it gets less work to do than any other. It rarely gives way, save in the lowest reaches of the river near the Chilka, where breaches have no serious results and flooding is inevitable.

The Bhargabi left (Class III) is the most troublesome of the embankments. Breaches have occurred so frequently at Adlabad in the 6th mile that since 1895 it has been decided to leave the gap open. The serious results that flow from this policy have been described in detail in the special report on Purbaduai, Oldhar Parganas, and it is hoped that the question will receive reconsideration

in the light of its relation to land revenue. The next weakest point is at Gabkand. No breach occurred here in 1896 because of the relief afforded by the Adlabad gap. The embankment from Gabkand to the head of the Kanchi outlet is shown in the maps as Class IV. I have not seen this portion of the embankment, but hope that it is not proposed to abandon it and intensify the misfortunes of the flood-afflicted Parganas to the east. The relief afforded to the river by the Adlabad breach and the escape channels near Puri is such that no breaches occurred in the lower embankment during floods of 1896.

The Kushbladra left embankment (Class II) is so aligned that breaches are inevitable in years of high flood. The embankments are funnel-shaped from the head of the stream downwards, and the contraction of the flood water volume can have no result but one. It is suggested by the Superintending Engineer in the report of 1896 that a gap be left at the point of breach. This, in my opinion, would be fatal to the prosperity of Kotdes, one of the richest Parganas of the District, accounting for over one-fourth of its total revenue. It cannot be argued that because an embankment is bound to give way in exceptional years, it should not be maintained in ordinary years when its beneficial effects are inestimable. Raiyats will cultivate their lands and pay their rents if they know that they will be protected in ordinary years. They are resigned to the misfortunes of exceptional years, but they cannot be expected to face cheerfully a certainty of calamity.

89. To complete the account of the effects of floods on embankments I make no apology for quoting Mr. Inglis' (Superintending Engineer's) note of January 27th, 1897, which sums up the existing situation and is to some extent a declaration of policy:—

"8 *Kawakhai Branch*.—The Kawakhai branch leaves the Katjuri on the right bank just below the Ganjam road, and flows through the Puri district. The chief peculiarity of this branch is that it has no large channel leading directly to the sea. The greater part of the water carried by it has to pass to the sea through the Chilka Lake. The channels by which the water is conveyed to the Chilka can in their lower portions carry only about 45,000 cubic feet per second, as compared with 334,483, the estimated discharge of the Kawakhai near its head in the flood of 1872. It is, therefore, obvious that whenever there is a high flood, a considerable part of the Puri district must become a lake for the time being.

"The flood entering the Kawakhai is first gauged at Kajipatna. The reading here on 27th July was 81.64 as compared with 82.63 in 1892. Roughly, about three-fifths of the total discharge of the Kawakhai flows into it directly from the Katjuri main stream, and about two-fifths come into it a little lower down across the Ganjam road from the spill over the right bank of the Katjuri. The next gauge is at Baliana, 14 miles below. At this place, the Kushbladra branch leaves on the left bank. The highest reading of the year here was 71.35, that of 1892 having been 73.05. The Kawakhai in this length is embanked throughout on the left bank. There was a small breach in the 10th mile which caused no damage and which was soon closed. On the right bank the Kawakhai is not embanked for some distance from its head; lower down there is a more or less continuous marginal embankment, but it is not of much importance, and it is among those which have been scheduled in Class IV. This was overtopped and breached in several places. The Kawakhai continues beyond Baliana for 7 miles as one stream. It then, in Sadaipur, splits up into the Daya, which is the larger stream on the right, and the Bhargabi on the left. This was not breached or overtopped, but some injury was caused by erosion. The highest reading of the gauge at Sadaipur was 53.67 as compared with 55.67 in 1892.

"9. *Daya Branch*.—The Daya branch, commencing at Sadaipur, continues as one stream until it reaches the Chilka Lake. It has a continuous embankment on the left bank which is able to stand a moderate flood such as that of 1895, but is bound to be overtopped and breached in a high flood such as that of the present year.

"10. *Kanti Breach*.—The first breach occurred in the 11th mile. It is 960 feet in length and the scour at the deepest part went down to 34 feet below the crest of the embankment. The gap will be closed either in the former line of bank, or by a ring bund, as may be found more economical. Breaches occurred here in 1872 and 1892, and as the flood way of the river narrows owing to high ground on the right bank just below this place, a breach here is inevitable in very high floods. It does not appear to be within the bounds of practicability, nor, if it were, would it, in my opinion, be desirable to raise the left embankment to such a height that it may pass all floods without breaching. This being so, there would appear to be only two alternatives—the one to leave things as they are, making good breaches when they occur; the other to construct, at suitable sites on the left bank, escapes or overflow weirs, which would give the required relief to the river. The water from this breach passed off along the course of the Nuna river. It is reported to have caused damage to the Khurda-Pipli road, to have breached the newly-constructed railway embankment close to the bridge over the Nuna river, and to have brought down many huts in the villages.

"11. The next breach occurred in the 18th mile. It is 340 feet long and 16 feet deep from crest of embankment. This is said not to have caused much damage. The water passed off down the Nūna river.

"The third breach took place some days after the first two in the 28th mile, and did not cause much damage as the country had already been flooded by the water from the first breach. It was 300 feet long and 16 feet deep.

"In addition to the above breaches, some damage was caused at several places by erosion, which will have to be made good either by slope cutting with stone pitching or by retired lines of embankment.

"12. At the Kanti gauge, which is 11 miles below Sadaipur and just below the first breach described above, the highest reading of the flood of this year was 37.95 as compared with 37.35 in 1892. In the latter year there were, however, in addition to a breach of 930 feet at the same place as the breach of this year, two other breaches above in the left banks aggregating 700 feet in length.

In this case, as in all others where the gauges are situated below the points at which the embankments breach, the readings are in themselves no criterion of the magnitude of the flood. They are useful as indicating the volume of water passing at a particular point in a particular flood. The right bank of the Daya is now, except for a few miles near the head, open to flood throughout.

"13. *Bhargabi Breach.*—We may now return to Sadaipur and consider the Bhargabi branch. This runs as one stream for 29 miles when, near the point where it is crossed by the Puri road, it throws off on the left bank the Kanchi branch. Further on it throws off also on the left bank the East Kania, the Naya nadi and the South Kania branches, and what is left of the Bhargabi finds its way to the Chilka Lake in conjunction with the Daya.

"When I say that the Bhargabi flows as one stream up to the point where the Kanchi takes, I refer rather to past than to present condition. For several years in succession, a breach occurred at Adlabad in the 7th mile of the Bhargabi on the left bank; it was decided last year to leave the breach open. About half the discharge of the Bhargabi passes out through this gap, and will take the course of the Dhamua river, which lower down joins the Kushbhadra. Part of the combined discharge passes directly into the sea through a channel much obstructed by sand, and the remainder has to pass through the Sar Lake and on past Puri parallel with the coast, till it finds an exit through the sand ridges to the sea. With the exception of this gap the water in the Bhargabi was within its banks (natural and artificial) till near its end, where, owing to the water escaping from the breaches in the left bank of the Daya river overtopping the banks, it joined in the general inundation.

"14. *Kushbhadra Breach.*—As has been mentioned above, the Kushbhadra branch takes off from the Kawakhai at Baliauta. This channel is now embanked for a few miles at its head, only the embankments lower down having been abandoned as useless.

"The present declared policy is to maintain the embankment on the right bank for a little over 6 miles, and on the left bank only for about half a mile, where it protects a village. As was mentioned in the report on the flood of 1895, there is a weak place in the right embankment close to the head, where a breach has occurred for several years in succession. This breach was closed by a strong bank in the early part of this year and would probably have stood an ordinary flood. The unusually high flood of this year rose to the crest of the old embankment and broke through a short distance above the new bank. This breach quickly spread and the whole of the old gap was opened out again. It seems a little doubtful whether we should not accept the situation and allow for an escape here. The water escaping at this place joins that from the Adlabad breach on the Bhargabi and takes the course of the Dhamua river to the Sar Lake. In the meantime the gap will be closed by a strong bank, which is likely to be effective for some years at all events."

90. The notes that have been given in the preceding section refer chiefly to the effects of flood on embankments and take

State of the District during little note of the effects on the country at large.
flood.

To Mr. Inglis' report is attached a map which shows roughly the area affected by floods and the areas free from flood and is reproduced as map No. I appended to this report. The area which is coloured blue represents the area which was submerged in 1896. The portion of the blue which is shaded with lines represents the area which under present conditions is liable to inundation in years of ordinary flood. The facts may be put briefly thus. In ordinary years the tracts liable to inundation are—

- (1) The West Daya tract, including West Lombai, West Serai and Balbhadrapur (of Khurda Subdivision); results serious.
- (2) The Dhamua basin, including the greater portion of Parganas Purbaduai, Oldhar, Matkatpatna and a small portion of Kotdes and Rahang Parganas; results serious.
- (3) The Samang Pat, north of Puri, suited for *dalua* cultivation. The inundation is a necessity, not an evil.

- (4) The lower reaches of the Kadua and the Prachi rivers; damage slight.
- 5) Portions of Parganas, Kodhar, Kurelo, Tapa Kanman. This is due to the inefficient state of the Khas Mahal and Public Works Department embankments on the south bank of the Debi.

The effects of inundation are most disastrous in tract (2), where the water lodges for a longer period than elsewhere on account of the inability of the Kushbhadra to discharge its volume quickly. It is also by far the largest of the tracts, and the annual loss of Government revenue, if the existing policy, is continued, cannot be estimated at less than Rs. 4,000. The loss of zamindars and raiyats is many times that amount, but cannot be gauged and reduced to figures.

In years of extraordinary flood the only portions of the District not liable to inundation are—

- (1) Kotrahang.
(2) Pasohinduai.

- (3) East Rahang.
(4) South-East Chaubiskud.

The whole of the rest of the District is converted into a lake for the time being. The effects are least disastrous in the northern Parganas where the ground-fall is sufficient to carry off flood water before irremediable damage has been done. Kotdes, Lembai, Antrodh, Damarkhaud and Banchas may be placed in this category. The Parganas further south are liable to suffer very heavy loss of crops. The loss in bad years is unusually total in those Parganas which even in ordinary years are subject to flood.

The problem of protecting the District from river inundation is a difficult one. It cannot, I think, be said that the present situation is very satisfactory, and it will not I believe be accepted as final. The problem is to conduct a given amount of water from the head of the district to the Chilka and the sea by channels that reduce to a minimum the chance of danger to the cultivated area.

In ordinary years the embanked channels of the Kawakhui distributaries are equal to the task. In extraordinary years they are unequal to it. The object to be aimed at is to conduct the excess water in directions by which it will do least harm. At present it is allowed to spill into low-lying areas, where the results are most harmful, while on the other hand complaints are made that where flood water is wanted on the shores of the Chilka to neutralise the salt impregnations of the hot-weather tides, a sufficient supply of river water is not now obtainable.

I make the above remarks with all due deference to the opinion of experts, as the problem is surrounded with professional difficulties which I have not the technical knowledge to estimate. It is further complicated by the claims of other tracts and by the want of funds. My chief object is to draw attention to the extent of the damage that is caused in certain areas by the present arrangement. A careful perusal of the Departmental Reports of recent years leads me to think that the damage in these areas has not been fully realised and considered.

91. A word should be added about the liability of certain tracts to salt inundation. All the rivers of the District, whether

Salt floods.

they enter the Chilka or the sea, run dry in the hot weather and are then liable to have salt water forced up their channels by the action of the tides and the strong breeze which blows from the south for several months of the year. When the rivers are embanked and the tides high and the breeze strong, the salt water overflows and does much damage to the cultivated fields. The tracts specially liable to this misfortune are a belt of about 5 miles round the shore of the Chilka in Parganas Chaubiskud and Serai and the lands situated on the lower reaches of the Kushbhadra, the Prachi, the Kadua and the tidal creeks of the Kodhar block.

Fields deeply submerged do not recover fertility for a period of three or four years. The crops are therefore precarious in tracts liable to this visitation. For such areas river inundation is highly beneficial. The saline impregnations get washed out of the soil by river flood, and the effects of tidal flood are counteracted. But for this happy contingency many large stretches of country

would doubtless lie waste along the Chilka shore. There have always existed salt embankments in a more or less fragmentary condition. An attempt was made in 1896 to improve these *bunds*, but the work was not completed. The subject has been fully discussed in the Khas Mahal reports of Serai and Chaubiskud Parganas, and I understand that an effort will be made in the cold weather of 1898-99 to complete the line of embankments. (Written in July 1898).

92. Mr. Taylor's embankment report of 1871 supplies a mass of interesting information regarding embankments as they existed then and as they were shortly after the last Settlement. His report embodies the results of enquiries made at the suggestion of the Embankment Committee which sat after the great famine of 1866-67. The object of the enquiry was to ascertain what obligations had been imposed on Government by the Settlement of 1837 as regards the up-keep of embankments, and to report how these obligations were being fulfilled. Mr. Taylor found as regards Puri that Government had nowhere covenanted to either construct embankments or to maintain them in repair, but he states that as a matter of fact "it has always been the custom for the Government to construct and keep up any embankment that might be required."

All the existing embankments were elaborately measured, described and detailed and suggestions were made for their improvement. It does not appear that save in the matter of the Adlabad breach, the embankments of 1870-71 were in a better or worse condition than at present. The Daya right had practically been abandoned; the Daya left, the Bhargabi right and left were maintained in good repair. The Kushbhadra right for about 13 miles was in good condition and the left was in great disrepair. The embankments on the smaller streams, some described as Government and some as zamindari embankments, were all in a state of great neglect; the Chilka embankments were in a condition almost exactly analogous to that of the present year.

Mr. Taylor gives some interesting extracts from a report made on the Puri embankments in 1858 by Captain Short, Superintendent of Bengal Embankments (pages 73-76). The Parganawar statements prepared by Captain Short show that the condition of the District in his times was worse than it is at the present day. It is curious to note that in discussing the case of Pargana Kotdes he uses the words—

"Before such large volumes of water found their way down the Kawakhai (*via* the Katjuri river), this Pargana could be irrigated and drained at pleasure, but of late years it has suffered in the extreme from the floods breaking the embankments and topping the Puri road, but when the equilibrium is restored at the head of the delta and a supply of water given commensurate with the channel the prosperity of this tract will be restored."

This indicates that a few years before the words were written (probably before the great flood of 1855) the volume of water carried through the Puri District was much less than it was in 1858 and than it is now. Both in 1858 and later in 1871 there was under consideration a plan of erecting a weir across the head of the Kawakhai to regulate the Puri water-supply.

The cost was estimated in 1871 at one lakh of rupees, equal to two years' cost of the annual repairs which then amounted to Rs. 50,000. The project has long ago been abandoned.

From Captain Short's statement it may be gathered that the Kodhar embankments were much neglected, and the country seriously liable to inundation

Kotdes suffered from breaches in the Kawakhai and Kushbhadra embankments.

Paschimduai was suffering from breaches in the Bhargabi embankments.

Parbaduai was two-thirds lying waste, and of *Oldhar* only one-seventh was cultivated on account of the disrepair of the Bhargabi, Sar Lake, Bengai and Dhanna embankments. (The condition of these two Parganas was worse if possible than at present).

Rahang was liable to serious inundation, and the only remedy suggested was the regulation of the Kawakhai discharge.

Kotrahany had suffered serious damage of late years and there could be no remedy save that suggested in Rahang.

Lembai was in the like condition to *Kotrahang* and *Rahang*.

Serai and *Chaubiskud* were very unfavourably placed on account of the absence of salt embankments.

Astrang ... } Were beyond the influence of the embanked rivers
Kanman ... } but not protected from the local streams, and various
Damarkhand ... } improvements were suggested. Compared with the
Banchus ... } above, present conditions show considerable advance
Matkatpatna ... } and improvement. From the hopeless way in which
Antrodh ... } Captain Short speaks of any policy other than that of
regulating the supply at the head of the delta, it would appear either that the volume of water passed by the *Kawakhai* is now less than it was in 1858 or that the plan suggested was of his own devising and was commended to the exclusion of others. Whether it is a solution applicable to the present situation, it is for others to say; my intention in examining these old records was merely to ascertain whether zamindars and raiyats have any grounds for making the suggestion that in the earlier years of Settlement revenue and rents pressed less heavily than now, because of the greater efficiency of the embankments. Whatever may have been the position prior to 1855 it would seem that at least since that year the reverse has been the case, and that with the exception of the single tract affected by the *Adlabad* breach, zamindars and raiyats are much better off now than they were thirty or forty years ago.

Rainfall and Temperature.

93. There are three stations for the registration of rainfall in the *Sadar* Subdivision, viz., *Pipli*, *Puri*, and *Gope*.

The following table shows the distribution of the rainfall month by month at the three registering stations, (1) normal, (2) for 1897:—

NAME OF MONTH.	PURI.		PIPLI.		GOPE.		AVERAGE.	
	Normal.	1897.	Normal.	1897.	Normal.	1897.	Normal.	1897.
January ...	28	...	0.33	Nil	0.25	Nil	0.28	Nil
February ...	0.78	4.25	0.38	20	0.51	1.07	0.55	1.87
March ...	0.61	2.55	0.82	4.78	0.62	3.43	0.68	3.58
April ...	0.45	0.08	0.20	Nil	0.11	0.22	0.25	0.10
May ...	3.02	1.40	3.56	0.96	4.40	Nil	3.66	0.78
June ...	8.06	5.12	8.17	4.35	7.81	4.05	79.6	4.50
July ...	9.80	19.91	10.92	14.06	10.53	18.35	10.11	17.41
August ...	10.38	9.57	13.58	8.61	12.06	6.83	12.00	8.33
September...	10.36	6.59	10.59	4.54	11.65	4.62	10.86	5.26
October ...	8.90	8.17	5.60	8.38	6.92	9.91	7.14	8.83
November ..	3.48	7.58	2.05	2.03	5.68	4.11	5.53	4.57
December ...	0.80	0.14	0.22	0.29	0.24	0.05	0.32	0.17
Total ...	56.92	65.36	56.42	48.30	60.18	62.70	57.84	55.42

It will be seen that in normal years the variations are very slight between one station and another. This is as one would expect in a flat country where the interval from one station to another does not exceed 25 miles. In 1897 there was excess rain at *Puri* and a slight defect at *Pipli* and *Gope*, but the rain was well distributed and a bumper harvest all over the District was the result. In 1896 the rainfall was heavier than normal, but there was practically nothing after August. The heavy rains of June and August caused floods which injured the crops, and the subsequent drought completed their ruin.

Puri Town is situated on the shore of the Bay of Bengal and its temperature is equable all the year round. It rarely falls below 70° or rises above 90°. In the hot weather a strong fresh sea breeze blows up from the south and renders a temporary stay there an agreeable change from the accustomed heat of the plains. *Puri* cannot yet be styled a hot-weather resort or a favourite watering-place of

Bengal. It has been, till lately, too much cut off from the world to be of much importance, but it is now connected with the East Coast Railway by a branch line, and already there are indications that Puri will be sought after in the hot weather. When railway communication with Calcutta has been established we may expect it to become a place of pilgrimage to seekers after health as well as to devout Hindus.

Puri Town is situated in the south of the District, while Cuttack is only 7 miles from the northern extremity. The temperature of the district generally may be supposed to lie between that recorded at Cuttack and that recorded at Puri. I give in tabular form a note about the temperature of 1897 for which I am indebted to the Meteorological Reporter of Bengal :—

MONTH.	PURI.			VARIATION BETWEEN PURI AND CUTTACK.		
	Maximum.	Mean.	Minimum.	Maximum.	Mean.	Minimum.
January ...	82·3	73·8	65·1	—4·7	—1·3	+1·9
February ...	85·7	79·8	73·8	—6·5	—1·5	+3·5
March ...	87·2	81·9	76·6	—8·9	—3·0	+3·0
April ...	90·7	85·1	79·5	—9·2	—3·6	+2·1
May ...	91·0	86·0	81·0	—10·8	—6·2	+1·5
June ...	89·9	85·6	81·0	—8·1	—4·1	—0·3
July ...	88·5	83·9	79·4	—3·1	—1·6	+0·1
August ...	87·6	83·4	79·2	—0·3	+0·4	+1·0
September ...	89·5	84·8	80·1	+1·6	+1·8	+1·9
October ...	88·8	82·8	76·7	+0·7	+1·3	+1·9
November ...	83·5	76·1	68·7	+0·2	+1·1	+2·0
December ...	79·6	69·9	60·2	+0·5	+1·7	+2·9
Average	87·0	81·1	75·1	—4	—1·2	+1·5

It will be seen that it is only in the daytime and for six months of the year that Puri has an advantage over Cuttack. During the months of August to October residence in Puri is very trying. The temperature is high, the atmosphere laden with moisture and the breeze, which blows strong in the hot weather, is absent. It is curious that, taking the whole year round, Puri should have a maximum average 4 degrees below Cuttack, and a minimum average $1\frac{1}{2}$ degrees above Cuttack. This alone shows within how narrow limits the Puri temperature ranges.

94. The climate of the sadar subdivision is generally salubrious; save in certain swampy tracts of the Chilka, it is free from malaria.

Climate

Perhaps the Subdivision can be divided climatically into four tracts—the northern Parganas, free from water-logging in the rains, are the healthiest; the flooded Parganas of the south are often submerged for over a month, and cannot but be unhealthy when the water is draining off and drying up; the coast belt, though always cool is often unpleasantly moist and is apt to be enervating after long residence; the Chilka belt is damp in the rains and the atmosphere is disagreeably saline in the hot weather. On the whole there is not much to complain of; I may add the testimony of personal experience by saying that I have been in the District for the better part of the last six years and have been to every nook and corner of it without contracting illness of any form.

95. The total area of the temporarily-settled Parganas, excluding detached lands of *killa* Khurda, is 651,300 acres. Of this

Extent of cultivation.

463,800 acres are cultivated, 33,600 acres are culturable, and 153,900 acres are unculturable. A copy of the *milan khasra* statements by Thanas is given in Appendix E. As, from a Collector's point of view, the Pargana statements have most interest, I extract from them the

following statements which show for each Pargana in Puri the proportional percentage of cultivated, culturable and unculturable land :—

NAME OF PARGANA.	Percentage of cultivated to total area.	Percentage of culturable, but not cultivated.	Percentage of unculturable.
1. Antrodh	79·	7·7	13·2
2. Astrang	49·4	23·8	26·8
3. Banchas	76·2	6·8	17·
4. Chaubiskud	58·24	5·57	36·29
5. Damarckhand	68·9	14·9	16·2
6. Kodhar	69·4	8·8	21·8
7. Kotdes	79·4	2·1	18·5
8. Kotrahang	82·3	2·5	15·5
9. Kurelo	62·5	15·5	22·
10. Lembai	78·3	4·1	17·6
11. Matkatpatna	35·5	6·3	58·2
12. Oldhar	46·3	3·7	50·
13. Paschimduai	82·5	2·	15·5
14. Purbaduai	79·2	5·4	15·4
15. Rahang	75·5	1·8	22·7
16. Serai ...	75·5	5·3	19·2
17. Tappa Kanman	50·	13·4	36·6
18. Athaisi	38·6	8·3	53·1
Total*	71·	5·1	23·9

The Parganas in which the percentage of cultivation most exceeds the average are Paschimduai and Kotrahang, which are both well protected by embankments from river flood. Kotdes, which is partially protected, comes next, and Purbaduai follows Kotdes. It must be said that the figures do not truly represent the present situation, and that, since the first Survey was made, much land has been thrown out of cultivation on account of the calamitous floods of recent years. Parganas Antrodh, Banchas, Lembai, Rahang and Serai are partly protected by embankments and partly exposed to flood. In Pargana Serai some of the land shown as cultivated has gone out of cultivation.

Of the Parganas in which the percentage falls below the average, Damarckhand, Kodhar and Kurelo run the average close. For the low percentages obtaining in other Parganas there are special reasons. Thus in Matkatpatna which has the lowest figure of all, and in Athaisi which is not much better, about half of the entire area consists of a belt of shores, and varying from 2 to 4 miles in width in which cultivation is a physical impossibility. The same reason applies to Oldhar, and in a lesser degree to Tappa Kanman, Astrang and Chaubiskud. In all these four last Parganas there is also considerable liability to inundation either from river or salt floods.

Of the Thanas, Pipli, which includes Kotrahang, Lembai, Paschimduai and Kotdes, is most highly cultivated. The percentage is 76. Thana Gope, which includes Athaisi, Astrang, Oldhar and Matkatpatna, as well as Antrodh and Banchas, is the least highly cultivated. The percentage is 62 as against 70 in Thana Puri, which contains Rahang, Chaubiskud and Serai.

The percentage of land that has been shown in the *milan khasra* statements as culturable is exceedingly small, only 5·1 per cent. for the Subdivision. This is probably an understatement. It may be expected that a large slice of the 23·9 per cent. entered as unculturable will gradually be reclaimed as the increase of population presses harder on the resources of the soil. It is noticeable that in the five Parganas situate in the north-east corner of the district, viz., Astrang, Damarckhand, Kurelo, Tappa Kanman and Kodhar, the highest percentages of culturable lands are shown. There is a considerable amount of low scrub jungle in these Parganas, and much of this has probably been entered as culturable. The differentiation between culturable and unculturable obviously depends much on the individual opinion of the officer in charge of the survey party. The amins working in the five Parganas were probably working under the supervision of one and the same officer.

96. There are two sources from which the extension of cultivation since last Settlement can be estimated. The first and less reliable guide is a comparison of the Survey records of 1837—41 with the present *milan khasra*.

Extension of Cultivation since last Settlement.

* For all the cadastrally surveyed portions of the subdivision, as in Appendix E.

More reliable information is to be obtained by comparing the assessed areas of estates according to the records of the last and of the present Settlements. The Survey record of course refers to a larger area, to the whole of the temporarily-settled Parganas. The Settlement records refer exclusively to temporarily-settled estates situated within the temporarily-settled Parganas. I make the former comparison by Parganas and the latter by completion blocks.

The Survey comparison gives the following results:—

NAME OF PARAGANA.	ACCORDING TO SURVEY OF 1837-41.		ACCORDING TO PRESENT SURVEY.		Percentage of increased cultivation.	Proportion of present cultivated to total area.
	Total area in acres.	Cultivated area in acres.	Total area in acres.	Cultivated area in acres.		
1	2	3	4	5	6	7
1. Antrodh ...	33,926	26,352	34,054	26,909	2·1	79
2. Astrang ...	5,594	2,728	5,743	2,839	3	49·4
3. Banchar ...	12,329	14,294	19,413	14,804	3·5	76·2
4. Chaubiskud ...	67,498	20,341	64,220	37,484	84·2	58·24
5. Damarkhand ...	18,767	12,356	18,876	13,012	5·3	68·9
6. Kodhar ...	17,406	11,664	17,574	12,210	4·7	69·4
7. Kotdos ...	1,16,194	86,020	1,16,296	92,455	7·4	79·4
8. Kotrahang ...	35,728	17,913	35,666	29,346	63·8	82·3
9. Kurelo ...	12,806	7,033	12,916	8,081	14·9	62·5
10. Lembai ...	57,580	30,807	57,575	45,161	46·6	78·3
11. Matkatpatna ...	6,915	2,203	6,709	2,383	8·1	35·5
12. Oldhar ...	26,331	1,875	26,319	12,195	550·4	46·3
13. Paschimduai ...	16,589	5,613	16,650	13,642	143	82·5
14. Purbaduai ...	20,802	4,283	20,888	16,559	286·6	79·2
15. Rahang ...	95,679	67,480	96,150	72,503	6·9	75·5
16. Serai ...	43,308	23,356	43,091	32,526	39·3	75·5
17. Tappa Kanman ...	4,208	2,024	4,163	2,335	15·8	56
18. Athaisi ...	33,289	11,975	33,363	12,893	7·7	38·6
Total ...	6,24,949	3,48,317	6,29,666	4,47,337	28·4	71·6

A comparison, however, of Survey figures with Settlement figures renders the distribution of areas in the former exceedingly doubtful. The Settlements were made within a year or two of the Survey. They were made by responsible officers working on the spot, and the mistakes of the Survey amins were cleared up before assessment was made. The Settlement records show a very different state of things from that shown by the Survey. I give below, by completion blocks, a comparison with last Settlement, and add a column to show how widely the results differ from the figures of the previous statement:—

Name of Completion Block.	AT LAST SETTLEMENT.		AT PRESENT SETTLEMENT.		Percentage of increase in assessed area.	Percentage of present assessed area to total area.
	Total area in acres.	Assessed area in acres.	Total area in acres.	Assessed area in acres.		
1	2	3	4	5	6	7
1. West Athaisi and Matkatpatna	10,612	3,405	10,660	3,883	14·0	36·4
2. East Athaisi and Damarkhand	32,507	13,397	36,453	18,027	34·5	49·4
3. Banchar ...	12,577	7,818	12,742	9,194	17·6	72·2
4. Kodhar ...	25,896	11,574	25,951	15,934	37·7	61·4
5. Lembai ...	54,925	35,131	53,123	44,327	26·2	83·4
6. Rahang ...	62,215	48,100	68,764	54,540	13·4	79·3
7. Kotdos, including Antrodh...	1,21,006	78,020	1,22,981	97,552	25·0	79·4
8. Kotrahang ...	27,632	20,005	28,041	23,305	16·5	83·1
9. Paschimduai ...	11,093	7,704	11,578	9,431	27·3	81·4
10. Chaubiskud ...	48,345	23,990	56,570	30,873	28·7	54·6
11. Serai ...	41,653	25,398	40,310	31,384	23·6	77·8
12. Purbaduai, Oldhar ...	37,754	14,415	37,787	18,340	27·2	48·5
13. Scattered estates ...	14,016	11,247	15,217	13,780	22·5	75·0
14. Estates with lands in Cuttack	3,024	2,237	3,086	2,751	23·0	74·0
Total ...	4,99,155	3,02,441	5,23,263	3,73,321	23·4	71·3

The Settlement figures are much more reasonable and much more intelligible than the Survey figures. While they show a total increase of 23·4 per cent., not differing widely from the total according to Survey records, they distribute the extension much more evenly over the whole district. The increase does not fall below 13 per cent. nor rise above 38, whereas according to Survey records, it ranges from 2 per cent. to 550 per cent. The Parganas in which there has been least increase have been West Athaisi, Matkatpatna, Banahas, Rahang and Kotrahang. These, except Kotrahang, are Parganas in which Survey records also showed little advance. It is worthy of notice that in Kotrahang, one of the first Parganas to be assessed, a considerable area lying fallow but culturable, was assessed to rent by the Settlement Officers of 1837. The Parganas in which the extension is notably above the average are Kodhar, Kurolo, Tappa Kanman, Astrang and Damarkhand. The area available for reclamation in all these Parganas was extensive.

At the last Settlement three-fifths of the total area of the temporarily-settled estates was brought under assessment. The proportion has now risen to over seven-tenths, and, as has been stated in paragraph 95 of the report, of the remaining three-tenths, only about one sixth is capable of reclamation. The reclamation of new land during the sixty years of the last Settlement was a prolific source of advantage to zamindars and proprietary tenure-holders. In this district it was almost the sole cause of the increase of assets which has rendered the present enhancement of Government revenue possible. This source of increase has now almost been exhausted, and for at least fifteen years of the new Settlement proprietary income and estate assets must remain practically stationary.

97. The composition of the unassessed areas at the last and the present Settlement is shown in the following statement:—

Composition of the unassessed area at last and present Settlement

LAST SETTLEMENT	Area in acres.	Percent age.	PRESENT SETTLEMENT.	Area in acres.	Percent age.
Unculturable waste (<i>nalaik padia</i>).	1,76,000	31·2	Unculturable lands	81,800	16·2
Culturable waste (<i>laik padia</i>).	4,600	·9	Jungle ...	13,800	2·6
Jungle	25,600	5·1	Old fallow	20,100	3·8
...	...	...	Grazing reserve	19,800	2·3
...	...	...	Cremation ..	1,500	·3
...	...	...	Current fallow	4,400	·8
...	...	...	Tanks and miscellaneous	500	·1
...	...	...	Orchards	1,400	·2
<i>Minha</i> ..	3,400	·7	<i>Minha</i> ...	1,900	·4
<i>Jagir</i> ...	7,100	1·4	<i>Jagir</i> ...	1,800	·3
...
Total unassessed ...	1,96,700	39·3	Total unassessed ...	1,50,000	27·0
Total assessed ...	3,02,400	60·6	Total assessed ...	3,73,300	73·0
...
Total ...	4,99,100	100	Total ...	5,23,300	100

Nalaik padia appears to have been a description that was not applied with any pretence to accuracy. Nearly one-half of the area must have come under cultivation during the sixty years of Settlement. It is probable that in the same way, though to much more limited extent, the present term "unculturable" will be found to be a misnomer. The small areas under jungle and orchard will be noted.

98. Appendices E and F give, Thana by Thana, the crop statement of the Sadar Subdivision (the permanently-settled Parganas excluded). From this has been extracted the following statement, which shows for each Pargana the proportionate distribution of the principal crops:—

NAME OF PARGANA.	Per-centage of early rice.	Per-centage of winter rice	Per-centage of spring rice.	Percent- age of mandia	Percent- age of kulthi and other pulses.	Percent- age of bari.	Percent- age of orchards.	Miscel- laneous.	Percentage of double- cropped area to net cropped area.
1	2	3	4	5	6	7	8	9	10
1. Antrodh ...	7.4	70.8	0.3	3.7	11.8	3.3	1.8	0.8	9.7
2. Astrang ...	3.1	82.2	0.3	4.4	4.1	4.3	1.3	0.6	3.5
3. Banohas ...	2.6	78.8	1.4	3.8	6.5	3.6	2.3	1.0	5.7
4. Chaubiskud ...	0.7	88.0	2.6	0.8	1.9	1.7	4.0	0.3	1.4
5. Damarkhand ...	5.8	74.4	1.7	3.0	8.4	3.7	2.0	1.0	6.2
6. Kodhar ...	5.5	75.8	0.2	4.5	6.6	3.1	2.1	1.9	5.2
7. Kotdes ...	8.4	66.3	0.1	0.4	16.7	4.2	3.4	0.7	18.7
8. Kotrahang ...	10.1	61.7	0.3	3.5	14.9	3.6	4.7	1.2	15.9
9. Kurelo ...	8.2	61.4	1.5	7.9	10.2	5.9	2.7	2.2	7.0
10. Lemhai ...	6.2	74.4	0.2	0.3	12.3	3.5	2.5	0.6	10.8
11. Matkatpatna ...	4.0	72.4	9.1	2.0	4.6	3.1	2.2	2.5	2.7
12. Oldhar ...	2.4	48.1	31.7	1.6	2.9	2.2	1.9	1.2	2.3
13. Paschimduai ...	19.1	44.7	1.2	0.9	24.2	3.5	4.7	1.7	30.9
14. Purbaduai ...	4.2	78.5	1.5	3.1	7.8	3.1	1.3	0.5	6.6
15. Rahang ...	1.7	72.7	8.8	1.1	4.4	2.3	8.1	0.9	3.1
16. Serai ...	1.5	89.5	4.2	0.4	1.8	1.5	0.8	0.3	1.6
17. Tappa Kanman ...	7.9	68.0	0.3	6.1	6.7	5.1	1.8	4.1	9.2
18. Athaisi ...	6.1	69.6	4.8	4.7	7.2	3.4	2.4	1.8	6.9
Total ...	6.3	78.4	3.5	1.9	10.9	3.3	4.1	0.4	9.3

From the Subdivisional total it will appear that winter rice (*sarad*) is grown on 78.4 per cent. of the total cropped area. The proportions of early (*biali*) and spring (*dalia*) rice are very small. The pulses occupy 10.1 per cent. of the total area. The two chief pulse crops are *kulthi* and *mung*. It is unfortunate that separate figures have not been prepared for each of these crops. My impression gathered from touring about in the district, was that the larger area is occupied by *kulthi*, but some Assistant Settlement Officers were of opinion that there is a preponderance of *mung*. In estimating below the food-supply of the district I have assumed that the two occupy equal areas. The area grown with *mandia* is very small. *Bari* lands and orchards cover 3.1 and 3.4 per cent. respectively of the cropped area. The area that is double cropped is 9.3 per cent. of the whole. There is, however, considerable reason to believe that the area shown as double-cropped and consequently also the areas shown as grown with *mandia* and pulse crops are under-estimates. It has always struck me while on tour that a very much larger proportion than 10 per cent. of the cropped area was cultivated in the cold weather with *mandia*, *kulthi*, *mung* and *biri* crops, and this impression has been corroborated by statements of Assistant Settlement Officers and Kanungos, who say that when Survey operation was first commenced—that is, in 1889-90—rai-yats and zamindars combined together wholesale to conceal the double-cropped area, and for two or three years refrained from growing winter crops. It was fancied that the new assessments would be a *fasal-bandi* assessment, and much was to be gained by concealing the *dofasali* land. As the assessment has been made on the basis of existing *pahi* rents, rai-yats and zamindars have gained nothing by the fraud, but we have been deprived of data from which the true food-supply of the District can be estimated. Varying estimates of the true *dofasal* area have been given to me by different officers. Some have placed the proportion as high as 33 per cent. I do not think that it can be much less than 20 per cent.

Keeping these general remarks in mind we may now look at the distribution of crops by Parganas. The figures which disclose most striking divergence from the normal have been in the statement put in bold figures and may be briefly noticed as follows:—

Early rice is grown in largest quantities in Parganas Kotrahang and Paschimduai. These are both protected Parganas of very varied level with a considerable proportion of high land. The Parganas in which least *biali* is grown are Rahang, Serai and Chaubiskud, which are all situated round the lower reaches of the great rivers at the point where they enter the sea and the Chilka. The lands of these Parganas are low-lying and flat and consequently not suited to early crops.

Winter rice is the principal crop in all Parganas, but the most striking preponderance is in the two Parganas Serai and Chaubiskud which grow least *biali*.

The proportion is lowest in Oldhar, which contains extensive *dalua* lands, and in Paschimduai with its larger *biali* and pulse-cropped areas.

Spring rice is grown in very small areas except in Parganas Oldhar, Matkatpatna and Rahang. Oldhar Pargana includes the Sar Lake, a fresh water lagoon into which the Bhargabi discharges through its escape channels, the Bengai and Kanchi rivers. The lake is about 8 square miles in extent and very shallow, and a large portion is cultivated with *dalua* in winter months. In Matkatpatna the presence of the Kushabhadra river which runs through the Pargana enables some *dalua* lands to be irrigated up to February or March, after which date the river becomes tidal. In Rahang *dalua* is grown chiefly on the Samang—Pat, a large expanse of low-lying country north of Puri town which gets flooded annually from the Bhargabi through the Dhanua, East Kania and Athar—nala escape channels.

Mandia is grown in comparatively small areas chiefly as a second crop. It will be noticed that it favours most the north-east Parganas Kodhar, Kurelo, Tappa Kanman and Astrang (included in the Kodhar block), and Athaisi, which adjoin Cuttack.

Kulthi, mung and biri, the principal crops of the pulse group, are grown chiefly on double-cropped land, and therefore most extensively in Parganas Kotdes, Kotrahang and Paschimduai, which alone have exceptionally large double-cropped areas. The very small areas covered by pulse crops in Parganas Chaubiskud, Oldhar, Rahang and Serai are, as I have said above, probably less than actual.

Homestead lands and gardens are diffused more or less evenly over the Subdivision. The area is conspicuously small only in Chaubiskud and Serai. These two Parganas are situated close to the Chilka. I have noted in the general description how the village sites in this tract consist of bare isolated mounds rising only a little above the general level.

Orchards, like homstead, are more or less evenly distributed. The area is noticeably small in Serai Pargana. It is large in Chaubiskud, because there is a large tract lying between the cultivated land in the heart of the Pargana and the belt of sand to the south-east which is covered with scrub jungles and fruit trees.

Miscellaneous includes a multitude of crops which are all grown on areas so small that percentages if calculated would not be of any particular interest.

The chief miscellaneous crops are castor oil, sugarcane, cotton, indigo, *pán*, tobacco and vegetables.

(i) **Castor-oil**. The castor plant is grown in small quantities in all Parganas. Its cultivation is most extended in Athaisi, and least in Serai.

Sugarcane is, according to Survey records, grown in all parganas except Chaubiskud, Serai and Matkatpatna. It is probably cultivated in portions of these three Parganas, but has escaped the notice of the Survey amins. The sugarcane areas in Parganas Athaisi, Kurelo and Tappa Kanman are relatively greater than elsewhere.

Cotton is grown in small quantities in all Parganas except Oldhar. There is very little in Matkatpatna, Serai, Chaubiskud and Paschimduai. The area is relatively greatest in Kodhar Pargana.

(iii) Cotton

Indigo (included under "Dyes—other") is grown in very small quantities in 13 out of the 18 Parganas of the Sub division. It is found chiefly in Kotdes Antrodh, Kotrahang and Damarkhand.

(iv) Indigo.

Pân (Betel) is grown in small quantities in ten Parganas—chiefly in Damarkhand, Rahang, Lembai and Kotrahang.

(v) *Pân* (Betel).

In north-west Damarkhand there is a *pân*-growing centre at a place called Narsingpur. Cultivation has extended much of recent years and the particular variety grown there has established for itself a popularity in the Cuttack and Calcutta markets, and is known by its local name as "*Narsingpur pân*." The *pân*-gardens of Kotrahang, Lembai and Rahang are to be found chiefly close to the Jagannath road. The *pân* grown in these gardens is sold to pilgrims and exported to Puri town.

Tobacco is grown in 11 Parganas. The largest areas are in Kotdes, Rahang and Paschimduai. The tobacco grown is for the most part consumed locally.

(vi) Tobacco.

Vegetables (included under "Miscellaneous crops—Food—others") are grown everywhere on riverside lands and lands adjoining the village sites. The areas are relatively large in Rahang, Kotdes, Kotrahang, Lembai and Paschimduai which are traversed by the principal rivers of the district and have extensive village sites. They are infinitesimal in Damarkhand, Astrang, Kurelo, Tappa Kanman, four of the north-eastern Parganas. The chief varieties are mentioned in Mr. Nathan's note quoted above.

(vii) Vegetables.

99. Mr. Nathan gives the following estimate of outturn per acre of the different classes of paddy:—

			Gauhi.	Standard seers
<i>Biali</i> ...	...	...	20 to 120	average 322
<i>Chota laghu</i> ...	...	...	50 to 60	" 253
<i>Medium laghu</i> ...	...	...	100 to 120	" 506
<i>Bara laghu</i> ...	...	...	140 to 160	" 690
<i>Sarad</i> ...	...	...	200 to 220	" 966
<i>Baradhan</i> ...	...	...	200 to 240	" 1012

Very few crop experiments have yet been made in Puri District, and it is therefore impossible to say how far these estimates which are based on enquiries made from cultivators can be accepted.

The only Puri experiments of which I could find records are the following:—

				Average outturn in seers.
Four made by Assistant Settlement Officer Babu Jatindra				
Mohan Sinha ...	...	...	...	669
Five made by Assistant Settlement Officer Babu Sudarsan				
Das ...	...	...	...	882

The general average of these experiments is nearly 800 seers.

As the Puri lands are none of them irrigated by canals, we may compare the averages found on irrigated lands of Cuttack and Balasore in the field season of 1895-96. In Cuttack the average of 28 cuttings was found to be 961 seers per acre, and in Balasore the average of 21 cuttings was found to be 936 seers.

In view of these estimates and experiments I think the produce of average *sarad* land may safely be taken at 900 seers per acre*.

The produce of *biali* lands varies within very wide limits. Some *biali* land is as good or better than first class *sarad* land, while on the other hand some is very poor. For want of exact information I think we may take the average of Mr. Nathan's estimates for *biali* and the three *laghus* as an approximation. The average is 443 seers, we may say 450 seers. For estimating the produce of *dalur* lands there are no Puri experiments to assist, but I take the following from the statement published with the Director of the Department of

* This is Mr. McPherson's estimate. It is higher than that adopted by me in Chapter VI of this report.

Land Records and Agriculture's No. 356A., dated 3rd March 1898. The average of experiments in the Cuttack and Balasore Districts was 1,226 lbs or 613 seers; 600 seers may be taken for simplicity.

About the outturn of crops other than rice there is at present absolute uncertainty, as will appear from a comparison of Mr. Nathan's estimates with averages entered in the above statements. I give them side by side:—

OUTTURN PER ACRE IN SEERS.

NAME OF CROPS.	Mr. Nathan's estimate.	Director of Land Records and Agriculture's statement of 3rd March 1898 (lbs. converted into seers).	Approximately.
<i>Mandia</i>	92	616	600
<i>Mung</i>	92	376	400
<i>Kulthi</i>	184	545	550
<i>Arhar</i>		510	500
<i>Biri</i>		375	400
<i>Chana</i> (grain)		407	450
<i>Galo</i> (castor oil)	92		
<i>Rasi</i> (oil)	69		
Mustard		215	200
Sugarcane		1,735	1,700
Wheat		355	360

Mr. Nathan's average for *mandia*, *mung* and *kulthi* appear to be inexplicably low; estimates based on experiments are more reliable.

Of Cotton or Jute I can find no estimate.

An acre of *pán* garden yields about 7,200,000 leaves a year, according to an estimate made by Mr. D. H. Kingsford, Assistant Settlement Officer in charge, Balasore.

An acre of tobacco land yields about 12,500 leaves (Mr. Nathan says five *joris* per *gunt*, each *jori* consisting of two strings with 50 leaves on each).

100. In the last section I have endeavoured to throw together some information on the subject of average outturns.

Food-supply of district.

It will be seen how imperfect and incomplete are the data available, but they are the best we have and I propose to use them in order to prepare a rough estimate of the food supply of the Subdivision. The crop statement of the Subdivision is confined to the temporarily-settled Parganas, that is to about 1,000 square miles out of total of nearly 1,200 (excluding the Chilka Lake).

The food-supply in this area may be estimated thus:—

Crop.	Area in acres.	Average outturn per acre in seers.	Total in maunds.
Rice—			
<i>Biali</i> ...	28,000	450	3,15,000
<i>Sarad</i> ...	3,56,000	900	79,65,000
<i>Dalua</i> ...	16,000	600	2,40,000
Total—Rice ...	4,00,000	...	85,20,000
Pulses—			
<i>Mandia</i> ...	9,000	600	1,35,000
<i>Kulthi</i> * ...	24,700	550	3,40,000
<i>Mung</i> * ...	24,700	400	2,47,000
Sugarcane ...	560	1,700	24,000
Total—Pulse, &c. ...	58,960	...	7,46,000
Grand Total ...	4,58,960		92,66,000

The areas under wheat, maize, *chana* and other miscellaneous food crops are inappreciably small, and it is unnecessary to include them in the estimate. The total area under oil-seeds is only 1,000 acres, and the outturn varies so much according to the situation of the land and the variety of crop that an estimate of the total yield is impossible. It is unnecessary to allude here to the non-food crops, which also occupy an infinitesimally small proportion of the cultivated area of the District.

* There are not separate figures for *kulthi* and *mung*, but as noted above, I have assumed that they are grown over a more or less equal extent of country.

101. The information that is procurable regarding the earlier fluctuations in the district population is very meagre and unreliable. The first regular census was made in 1872.

Note about Population.

Prior to that we have only rough estimates made by the Police and Survey Departments and based on the numbering of houses. At page 232 of the Famine Commissioner's Report of 1866 there is a statement of the population of the District by Parganas compiled by the Police in October 1866. It shows the number of inhabitants before the famine and the number that died during the famine. From the Survey office I have obtained a statement of the number of houses and number of inhabitants compiled in the Survey operations of 1837-42 for all Parganas of the District except Malud, Bajrakote, Parikud, Manikpatna, Chaubiskud and Serai. I find that for the Parganas for which the figures of both periods are available, the increase of population for 1837 to 1865 amounted to 16 per cent.

Assuming that the same increase occurred in the six Parganas mentioned we are able to construct the following comparative table for the three periods 1837-41-1865 (before the famine) and 1866 (after the famine):—

Name of Pargana.	Population in 1837-41.	Population in 1865.	Population after famine.	The bracketed entries in the 2nd column are those derived by inferential comparison.
Malud ...	(2,870)	3,329	1,812	
Banjrkote ...	(3,312)	3,843	1,947	
Parikud ...	(8,823)	10,235	4,433	
Manikpatna ...	(5,262)	6,104	1,627	
Chaubiskud ..	(24,701)	28,654	9,727	
Serai ...	(9,813)	11,384	3,966	
Rahang ...	84,228	80,375	43,229	
Lembai ...	29,979	41,896	37,896	
Kotrahang ...	22,556	39,889	27,889	
Paschimduai...	14,630	18,326	16,828	
Purbaduai ...	11,083	13,829	8,395	
Kotdos ...	86,951	93,424	53,603	
Banohas ...	10,280	10,067	5,781	
Athaisi ...	6,926	13,447	7,561	
Antrodh ...	15,900	20,643	10,663	
Astrang ...	1,274	2,293	745	
Kurelo ...	5,433	10,920	5,233	
Kodhar ...	7,807	14,102	6,022	
Marichpur ...	6,421	7,449	3,222	
Damarkhand...	7,980	12,445	5,532	
Oldhar ...	6,318	8,400	4,296	
Matkatpatna ...	1,062	1,039	603	
Total ...	3,77,559	4,52,133	2,61,610	

The increase of population in the first thirty years of the Settlement averaged as before mentioned 16 per cent. Then came the terrible calamity of the great famine, which according to the Police numbering reduced the population of the Sadar Subdivision by over 40 per cent. The population in 1866 remained about 30 per cent. below what it had been thirty years before.

The first regular census was made in 1872. In this, as in the Census Reports of 1881 and 1891, the statistics that were compiled are *Thanawar* and it is impossible to extract figures for each Pargana without an amount of expenditure and trouble incommensurate with the object. Looking however, for the present, to the Subdivision as a whole, we find that in 1872 the population had gone up to 488,751. In 1881 it rose to 564,759 and in 1891 to 613,575. The fluctuation may be shown briefly thus:—

Period of numbering or Census.	Population.	Percentage of variation on previous period.	Percentage of variation on last Settlement Survey numbering.
1837-41 (Survey)	377,559		
1865 (before Famine)	443,133	+ 16	+ 16
1866 (after Famine)	261,610	- 40	- 30
1872	488,751	+ 87	+ 30
1881	564,759	+ 15	+ 50
1891	613,575	+ 8	+ 62

The most remarkable fact in the history of the district population is the celerity with which it recovered after the violent interruption of the Famine year. In six years the population nearly doubled itself, but this can scarcely be regarded as within the bounds of possibility and the true explanation seems to be either that the population before the famine was very much under estimated or that the number of deaths was very much over-estimated. Both causes were probably at work. It is exceedingly likely that as the number of deaths was estimated from the number of empty and deserted houses, a great many people who had temporarily removed to Khurda and the *Garhjats* were counted amongst the dead. Leaving out of account the extraordinary disturbance of the Famine year, and comparing the population of 1872 with the previous population of 1837 and 1865, and with the subsequent censuses of 1881 and 1891, it will appear that there has been a steady advance in the population. The growth from 1872 to 1891 has been 25 per cent. It is not improbable, then, that the advance from 1837 to 1872 amounted to 30 per cent., and I am therefore inclined to place considerable reliance on the result of the Survey count of last Settlement.

The statistical records of the censuses of 1872, 1881 and 1891 being *Thanawar*, I have endeavoured for the sake of comparison to build up Thana totals from the Pargana figures of 1837 and 1865. For Parganas not contained entirely within one Thana a division has been made according to the existing number of houses as counted in the present Survey and Settlement operations. An attempt has also been made to estimate the present population of the District. The number of houses in each thana being known, it has been multiplied by the *Thanawar* average number of persons to each house according to the 1891 census. In this way the following comparative table has been prepared:—

Name of Thana.	Population in 1837-41.	Population in 1865	Population in 1872.	Population in 1881.	Population in 1891.	Present number of houses.	Multiplicand per house according to census of 1891.	Estimated present population.	Variation of present estimated population and population at last Settlement	REMARKS.
1	2	3	4	5	6	7	8	9	10	11
Gope ...	74,796	106,944	96,096	116,167	134,038	23,468	6.0	142,268	91	Thana Puri includes the town of Puri and Nabha thana of the 1872 census.
Pipli ...	144,663	171,642	204,575	220,743	241,670	45,855	5.3	241,971	75	
Puri ...	155,370	164,627	189,240	221,810	238,077	38,908	6.0	234,491	55	
						(Town)	4.4	30,479		
								244,970		
Total ...	377,669	443,193	494,751	556,759	613,575	114,763	...	434,140	66	

The present estimated population is only 2.7 per cent. in advance of that ascertained in 1891. The advance of 1881 on 1872 was 15 per cent., and of 1891 on 1881 8 per cent. It may be that the pressure of population on the resources of the soil has gone almost as far as it can go and that this is the cause of the slowness of the advance made during the last decade. On the other hand the Survey count of houses may be incorrect and this method of estimating the population does not in any case pretend to be very exact. The table shows that the growth of population has been greatest in Thana Gope. This is not unnatural, as that Thana was at last Settlement and still is the least developed of the three. It is still much more cut off from the rest of the world by absence of communication than Thanas Pipli and Puri, which have in addition to the Trunk road, recently acquired the convenience of Railway communication. Looking to the general result of the above enquiries it may I think be safely assumed that the increase in the population of the Sadar Subdivision during the term of the last Settlement has been not less than 60 per cent. The importance of this conclusion from the revenue and rent point of view will be discussed below.

The number of males as shown in the census returns is slightly in excess of the number of females, especially in Puri Town.

Division by sex. The proportions are—For the Subdivision, males, 50.6; females, 49.4. For Puri Town—males, 55.3; females, 44.7.

Puri being one of the chief strongholds of Hinduism it is not surprising to find that Hindus compose 98·6 per cent. of the total population. Musalmans represent 1·3 per cent. The proportion of Hindus is highest near the precincts of the sacred city, viz., in Puri Thana and Puri Town. There are a large number of Musalmans in village Gope, accounting for the high proportion in that Thana.

The general proportion of Hindus to Musalmans throughout Bengal in 1891 was 64·07 and 31·70 per cent., respectively; in Cuttack 97·00 and 2·73; in Balasore, 97·90 and 2·10. Puri is thus pre-eminently a home of the Hindus.

102. It will be seen from the census statements that nearly 7 per cent. of the resident population in 1891 consisted of immigrants. By far the largest number came from Cuttack District, and of these most settled in Thanas Gope and Pipli, where it may be presumed they engaged in cultivation and its accessory occupations. The settlers in the southern portion of of the District came chiefly from Madras. The recorded immigrants of Puri Town were probably for the most part pilgrims. There is no emigration from the District in the more special sense of the term. There is a constant influx and efflux of pilgrims and labour between Puri and the neighbouring districts of Ganjam and Cuttack, but there is no cooly emigration. The difficulty of communication with Calcutta has been hitherto a well-nigh insuperable obstacle. Now that it is shortly to be removed we may expect to find the cooly recruiter in the District. The year 1896 was a year in which there was more movement of population than usual. The scarcity prevailing in the flooded Parganas Purbaduai, Oldhar, Serai and Chaubiskud drove many of the poorer agricultural labourers to seek work on the East Coast and Bengal-Nagpur Railways. Many of these labourers have not yet returned to their homes as the prospect of cultivation in Purbaduai and Oldhar is still by no means bright.

Part II.

CHAPTER V.

IRRIGATION AND PROTECTION IN ORISSA.

103. In the last three chapters an account of the effects of flood and drought, and of the measures adopted in each of the three districts to mitigate such effects, has already been given, and I now propose to give a summary of the history of irrigation in Orissa and of the influence of canals and embankments on rents and revenues.

The correspondence on this subject ended with letter No. 1764 S. of the 4th October, 1899 from the Director of Land Records and Agriculture to the Secretary to the Board of Revenue, in paragraph 7 of which it was promised that the question should be dealt with in the final report on the Settlement, and in order to make this part of the report complete in itself a good deal of information that may also be found elsewhere is here repeated.

104. The Orissa canals were begun by the East India Irrigation Company, on the failure of which the works were taken over by Government at a valuation.

Early history of the canals.

The present project was commenced in 1868 at an estimated cost of Rs. 3,23,15,845 including Rs. 2,94,089 for loss by exchange, and the construction estimate was closed on the 31st March, 1895. Two estimates aggregating Rs. 61,858 were sanctioned by the Bengal Government in 1893 and 1895, and the total expenditure to the end of 1895-96, against the old and current sanctions, amounted to Rs. 2,62,21,846 including a sum of Rs. 2,68,070 for loss by exchange; the expenditure of a lakh-and-a-half in the next two years raised the total to Rs. 2,63,73,151. As the result of this outlay,* the Province of Orissa has been provided with the following works, which are for the most part situated in the Cuttack District:—Seven weirs across river channels with an aggregate length of $3\frac{1}{2}$ miles, and constituting, with the canal head sluices and entrance locks, the most extensive system of head works of any canal system in India. There are 204 $\frac{1}{2}$ miles of canals, which are navigable in addition to carrying water for irrigation; there are also 75 miles canal for irrigation only. Besides, there are 109 $\frac{1}{2}$ miles of distributaries and village channels. The maximum discharge of the canals in 1895-96 was 6,058 cubic feet per second and the area shown as commanded is 56,20,000 acres.†

The Orissa canals have never paid their way; the water rate is only Re. 1-8 per acre and the receipts for both navigation and irrigation barely cover the working charges and do not touch the interest. Thus it was natural that the responsible officers and Government should cast about for a means of meeting the deficit. As early as 1874 Colonel Gulliver proposed an extra rate of annas 8 per acre for protection; and in 1877 a Bill was drafted and introduced into the Bengal Council with the object of imposing a compulsory cess upon the occupants of all lands irrigable from, or protected by, the Orissa and South Bihar Canals, Mr. G. Toynbee, I.C.S., being deputed on special duty in the same year to make special enquiries in Orissa in connection with it. The Bill was, however, subsequently drafted, mainly on the ground that the prospects of irrigation in South Bihar were more favourable than had been expected. In 1881 some further suggestions were made by the officers of the Public Works Department for the enhancement, during the coming Settlement, of *pahi* rents by Rs. 2-8 per acre where efficient protection had been given (see Mr. Commissioner Smith's letter No. 326 I, dated 21st November, 1881). Eventually these proposals resolved themselves into a suggestion for the levying of a special rate in addition to the land revenue on the lines of the North-Western Provinces Act VIII of 1873.

The history of the enquiries made in Orissa for the purpose of deciding on the justice and expediency of such a tax are summed up as follows in a letter by Mr. Maude, the late Settlement Officer:—

105. The last epoch of the history of the question of imposing an owner's rate on canal irrigated lands appears to have commenced from the date of a Minute of the Secretary of State in the year 1883, in which it was remarked with reference to certain irrigation reports of the Government of

* History of enquiries down to 1892.

* See also paragraphs 56 to 63 and 72 to 75.

† See Revenue Report for 1897-98.

India in the Public Works Department, that no reference was made to the question of an owner's water rate, which it was said had been the subject of former correspondence with the Government of India.

It was further requested that the Secretary of State might be informed of the proceedings of the Government of India in this matter. The object of an owner's rate was at that time defined as the securing to the State of its shares of the higher rents which the landlords have, by reason of canal irrigation, been able to impose on the cultivators.

In letter No. 780R., dated the 13th August, 1883, the Government of India called on the Bengal Government to consider the question with special reference to the temporarily-settled tracts of Orissa only, and at the same time recited some of the chief points in favour of and against the imposition of an owner's rate, namely, on the one side the unremunerativeness, both at that time and as far as could be foreseen for some time to come, of the Orissa canal systems and the fact that an owner's rate could be imposed at once, whereas an increase of land revenue was barred until the year 1897, and on the other the probable discouragement of zamindars from inducing their raiyats to take canal water, and the possibility of the zamindars handing the onus of the rate on to the raiyats so as to make it result in a mere increase of water rate. It was fully recognised that the imposition of an owner's rate depended on the assumption that rents had largely risen owing to the canal works, and in support of this an opinion was quoted of the then Commissioner of Orissa to the effect that the rise in rents had been not less than Rs. 2-8-0 per acre on areas merely protected by canal embankments, letting alone any rise due to irrigation itself.

The conclusions of the enquiry which resulted from the revival of the question in 1883 are set forth in a report from the Commissioner to the Board of Revenue, dated the 21st June, 1884. The Commissioner was of opinion that there was no evidence to show either that the increase in rents had been greater in irrigated than in non-irrigated tracts, or that such increase as there had been was due to the canals. In support of the former statement he referred to the rise in rentals as shown by the latest road cess valuations. From examination of a number of villages of both classes (within and without the range of canals) it appeared that, in the irrigable villages, the rise in ten years had ranged from 5·8 to 17·4 per cent., while in the non-irrigable villages it had ranged from 12·9 to 17·8 per cent. In view of the above facts it was decided that, before anything further was done, the question should be discussed by the Canals Commission, which was then about to sit to enquire into certain complaints as to the administration of the Orissa canals. The Commission was appointed in the same year, 1884, and took up this question among others. Their decisions, which are given in paragraphs 50-67 of their report, are summed up in a letter from the Government of India, No. 492 R., dated the 13th September, 1887. The Commission held briefly that the evidence of a rise of rentals due to the canals was not sufficiently clear or separable from that of a rise due to other causes to warrant the imposition of any general or proportionate owner's rate, and that the proper apportionment of such a rate upon lands where rents have directly risen from canal irrigation would be a difficult and probably unremunerative task. They believed also that the *pahi* or ordinary unprotected raiyats in Orissa were so depressed that any rate thus imposed on the landlords would be passed on to the tenants, and thus increase the unpopularity of irrigation. They did not recommend that Government should attempt to levy an owner's rate. They suggested as an alternative the imposition of an insurance rate against floods and droughts. The local Government did not, however, see its way to recommend even this alternative proposal. The Government of India did not consider the information on the subject to be complete, and enquired whether the agency of the *kanungos* of the Province could not be utilised to check zamindars' papers, so as to afford reliable information as to the best means of levying canal revenue.

During the year 1888 personal enquiries on the above point were made both by the local officers and by the Director of Land Records. The result of the enquiries showed that it was hopeless to attempt to obtain correct returns by the agency of the *patwaris* and *kanungos*. The Director of Land Records accordingly suggested that in the coming Survey and Settlement operations, the irrigated parts should be first taken in hand and accurate data thus obtained

on which a decision as to an owner's rate could be based. With this view, he suggested that a distinction should be made in the records between:—

- (1) Lands brought under cultivation *entirely* owing to irrigation from canal.
- (2) Lands which are only irrigated in years of drought and are therefore merely protected from a failure of crop.

The proposals of the Director of Land Records were recommended to the Government of India and were approved in that Government's letter No. 453 R., dated the 27th June, 1889. It does not appear, however, that they were ever reduced to any practical form in the records, although in a letter of the Bengal Government, No. 339 L.R., dated the 16th March, 1891, the following point among others was suggested as requiring statistical information:—

The effect of canal irrigation on the rent roll, and whether any increase due to irrigability has taken place which will justify Government in immediately putting an owner's rate on the landlord.

The instruction was subsequently followed by Government letter No. 1022 L.R., dated the 6th August, 1891, and by Government letter No. 282 L.R., dated the 26th July, 1892.

As the result of these orders, long notes based on *a priori* reasoning were written by Messrs. Sen and Mitra, Assistant Settlement Officers, and a detailed enquiry was made by the former officer into the extension of rents and cultivation in the permanently-settled estate of Darpan on the High Level Canal.

In 1893, Messrs. Sen and Mitra were placed on special duty to complete the necessary enquiries, and they submitted reports, the former on 29 villages on the Kendrapara Canal System, the latter on 14 villages on the Taldanda-Machgaon System. These reports, together with an abstract of Mr. Sen's report on Darpan, were submitted to Government along with Mr. Maude's letter No. 2399 of the 16th November, 1893.

The Government of India were not however willing to accept this report as final, and in their letter No. 342-343 of the 29th January, 1895, laid down the broad lines on which the Settlement Officers should proceed in their future enquiries. These orders were elaborated by the Director of Land Records and Agriculture in his letter No. 2201 S., of the 24th July, 1895, and his instructions were approved by the Board of Revenue in their letter No. 842 A., of the 12th August, 1895.

In 1896 a report was submitted by Babu Sri Gopal Bhattacharji on the effect of irrigation in Balasore; but as he found only 10 villages in the District with a substantial area irrigated, the report did not add very much to our information.

Nothing further was done until after the conference in Cuttack of January 1897, when definite instructions were issued to all officers settling rents in the field, for the compilation of statistics of the lines laid down by the Director.

At the end of the year, reports were received from seven officers dealing with the figures for 320 irrigated and a number of unirrigated villages, situated on all the canals except the Machgaon and Jajpur Extension.

The figures were abstracted in a note by Mr. Webster, but were not considered to afford, in themselves, sufficient material for a final report to the Government of India.

Since then, reports dealing with the revenue proposals for almost all Parganas in Cuttack have been received, and in all cases where lands are either protected or irrigated the effect of such irrigation and protection on rent rates and extension of cultivation forms the subject of one or more paragraphs of the report. Lastly, the large permanently-settled Pargana of Derabisi has been attested in order to add to our information as to the effect of irrigation in permanently-settled areas, and two reports embodying the results of this enquiry have recently been submitted to the Director.

A preliminary report on the conclusion based on the reports for the settlement of revenue has also been submitted with this office letter No. 281 of 6th April, 1899 and forwarded to the Board of Revenue with letter No. 1764 S., of the 4th October, 1899 from the Director of Land Records.

106. The lines on which the present report should proceed are laid down in a note of the 8th December, 1898 by Mr. P. C. Lyon, the Director of Land Records.

In this note it was enjoined that the report should deal separately with permanently and temporarily-settled areas, and that answers to the following questions should, if possible, be given for both:—

- (1) Have rent rates risen in consequence of the facilities for irrigation?
- (2) Has cultivation extended to lands only culturable with the help of irrigation?
- (3) To what fresh areas will irrigation from canals now existing extend during the course of the Settlement?
- (4) Has the protection afforded by canal embankments (as distinguished from agricultural embankments)—
 - (a) Raised rent rates?
 - (b) Brought new lands into cultivation, and to what extent?
- (5) To what extent has this protection improved collections?

It is in the first place very difficult to observe the distinction here laid down between canals and canal embankments. Difficulty of following these lines.

These embankments are said to protect from flood nearly $5\frac{1}{2}$ lakhs of acres, while some 2 lakhs of acres are irrigated.

The lands of most villages and of the majority of tenants within this protected area comprise both irrigated and unirrigated lands, and the figures quoted by me must be understood to embody the results of protection accompanied by irrigation, though I shall endeavour to separate the results in the light of the criticisms of the local officers.

It appears to me that the first point to be considered is the extent to which Orissa stands in need of any artificial supply of water, and to this end I give here a short note on the rainfall. After reading this it will be easier to understand the variations in the area irrigated, and the uncertainty of the results.

107. Orissa is primarily a land of abundant rainfall. The table annexed shows that since 1860 the average registered fall for the year has been 62.02 inches on the whole, viz., 60.87 in Cuttack, 66.34 in Balasore, and 58.85 in Puri, and the only occasions on which it was less than 50 inches have been in Cuttack the years 1864, 1869, 1870, 1876, 1877 and 1885; in Balasore 1873 and 1879, and in Puri 1864, 1865, 1869, 1870, 1876, 1877, 1885 and 1887.

It will be seen that the deficiency is more frequent in Puri, which is also the only district in which the fall is occasionally less than 40 inches. It is not, however, by any means the case, that a little shortage in the rainfall must entail loss of crops. The most serious famine of the century was caused by failure of the September and October rains in 1865, and in spite of the very scanty fall of 1876 and 1877 the rains of September and October saved the crops. In 1896 with a rainfall of but little below the normal, serious loss was caused by the cessation of the rains early in September, the effect of this being much aggravated by high floods in the early part of the year and in August.

It is evident that a well-distributed rainfall of 40 inches with not less than 4 inches* in October is sufficient to secure the crop, though for a bumper harvest at least 50 inches with 8 inches in September and 6 inches in October is needed.

In the last 39 years the fall of October has been less than 4 inches fifteen times in Cuttack, twelve times in Balasore, and only six times in Puri: such failure is however most serious in this last district, which depends to a very great extent on the late rain. On the whole we may say that once in every four years the rainfall is less than the maximum compatible with the ripening of the crop, and causes the loss of a fourth to a half of the rice in the unirrigated lands.

* See paragraph 429 of Famine Commissioner's report of 1866.

Statement showing the rainfall in inches:—

YEAR.	CUTTACK.			BALASORE.			PURI.		
	September.	October.	Total fall of the year.	September.	October.	Total fall of the year.	September.	October.	Total fall of the year.
1	2	3	4	5	6	7	8	9	10
1860 ...	12.50	0.70	46.80	15.20	1.30	50.60	20.00	4.50	74.10
1861 ...	15.68	4.56	76.28	7.40	4.70	76.50	14.10	6.10	73.00
1862 ...	11.98	13.33	62.98	35.40*	29.30*	111.90	16.60	42.20*	136.10
1863 ...	7.10	2.00	69.77	14.95	7.70	86.80	15.30	7.80	60.90
1864 ...	8.90	2.60	48.70	7.90	6.10	64.90	8.60	6.20	42.20
1865 ...	7.44	...	51.10	9.30	0.30	52.60	5.20	...	36.30
1866 ...	2.60	11.85	60.95	10.50	8.55	68.25	12.10	11.10	77.20
1867 ...	10.11	5.40	50.75	15.22	9.00	67.62	10.60	14.30	70.00
1868 ...	9.80	1.96	52.81	9.60	0.40	77.00	5.05	0.30	50.97
1869 ...	9.23	5.35	48.14	13.19	6.74	49.77	12.48	0.69	44.87
1870 ...	8.80	8.61	49.92	11.46	7.69	54.77	6.58	10.95	43.44
1871 ...	9.67	0.91	50.39	14.82	5.13	63.41	12.39	1.40	56.32
1872 ...	8.76	16.16	71.16	13.97	11.97	71.29	7.04	16.19	75.14
1873 ...	6.27	2.54	38.61	7.31	4.69	48.35	9.21	12.53	52.72
1874 ...	12.13	10.71	86.74	7.60	12.03	55.19	4.87	9.62	61.78
1875 ...	19.26	10.25	91.92	12.69	2.37	59.45	11.37	15.01	64.16
1876 ...	9.83	4.89	41.28	15.95	10.32	82.72	9.61	6.64	34.93
1877 ...	6.25	3.05	41.13	5.51	3.32	67.40	0.70	4.51	35.15
1878 ...	6.40	4.92	54.57	7.90	8.59	61.89	13.56*	14.08	54.66
1879 ...	9.41	4.89	60.62	17.09	6.10	49.62	12.11	4.56	53.57
1880 ...	10.29	5.17	67.06	11.63	5.38	74.33	15.14	10.63	87.58
1881 ...	11.27	2.33	59.33	14.72	9.65	79.71	6.30	4.37	49.83
1882 ...	11.86	7.64	75.96	21.09	10.10	79.02	7.54	7.95	43.93
1883 ...	12.93	0.55	67.24	3.76	1.70	63.21	13.61	4.96	61.18
1884 ...	8.63*	2.40	59.42	13.57	4.48	76.24	15.10	17.13	65.01
1885 ...	8.33	2.60	47.74	11.07	1.84	59.88	6.05	5.73	38.16
1886 ...	13.99	11.77	79.70	17.82	5.65	73.96	14.78	6.14	66.55
1887 ...	7.03	2.26	54.03	4.99	3.09	53.43	6.31	5.68	38.20
1888 ...	8.81	1.34	56.93	12.32	1.64	59.34	7.80	1.66	44.22
1889 ...	5.26	8.24	69.88	6.15	8.52	57.26	6.44	12.43	79.01
1890 ...	17.53	7.39	65.31	18.68	10.16	66.57	14.77	10.61	72.02
1891 ...	23.72	1.68	73.76	16.81	0.76	69.52	16.09	2.83	59.93
1892 ...	10.35	7.39	50.34	11.40	7.93	55.24	8.34	5.87	46.57
1893 ...	15.44	5.03	81.52	19.04	5.65	92.39	17.30	7.96	71.23
1894 ...	6.45	7.76	60.82	6.86	4.70	61.69	7.54	7.50	52.38
1895 ...	8.60	5.89	67.71	6.52	3.73	58.67	12.77	7.31	67.87
1896 ...	9.49	0.03	58.52	10.59	...	62.17	6.83	0.31	53.13
* 1897 ...	7.89	8.92	63.82	5.90	14.13	65.05	7.45	10.12	55.12
1898 ...	8.56	9.01	59.85	11.33	10.31	59.62	6.57	9.75	50.55
Average ...	10.22	5.44	60.87	12.26	6.56	66.34	10.52	8.55	58.85

Average of Orissa—Fall in September
 Fall in October
 Total fall of the year
 * Cyclone.

11.00
 8.55
 62.02

Extent of Irrigation.

108. The areas irrigated by the Orissa canals from 1870 up to date are as follows:—

YEAR	ORISSA PROJECT.						Total.
	Taldanda Canal and its branches	Kendrapara Canal and its branches.	High Level Canal—Range I.	High Level Canal—Range II.	High Level Canal—Range III *	Jajpur Canal.	
1	2	3	4	5	6	7	8
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1869-70 ...	...	1,564	165	..	...	...	1,729
1870-71 ...	999	8,967	12,162	...	...	...	22,128
1871-72 ...	292	8,860	7,501	...	...	...	11,653
1872-73 ...	198	4,318	237	...	...	...	4,753
1873-74 ...	1,733	7,825	3,013	...	...	...	12,571
1874-75 ...	4,095	11,105	7,259	...	...	...	22,459
1875-76 ...	1,271	11,577	5,561	...	...	...	18,409
1876-77 ...	5,157	17,206	8,019	...	..	...	30,382
1877-78 ...	32,604	53,769	12,122	...	...	...	98,495
1878-79 ...	36,097	61,083	14,070	...	...	..	111,250
1879-80 ...	37,279	57,641	13,715	189	214	...	109,038
1880-81 ...	39,400	61,871	14,023	182	51,745	...	117,221
1881-82 ..	43,941	70,627	15,588	243	1,839	...	132,278
1882-83 ...	44,131	72,468	13,955	289	1,585	...	133,028
1883-84 ...	10,300	23,685	11,437	323	2,515	...	48,760
1884-85 ...	10,546	33,022	12,270	...	3,104	...	58,942
1885-86 ...	15,489	36,375	13,404	265	6,806	...	72,339
1886-87 ...	18,685	39,714	12,412	407	6,491	...	77,709
1887-88 ..	31,277	54,404	15,312	994	7,569	...	109,566
1888-89 ...	40,391	72,796	18,092	2,385	25,628	...	159,292
1889-90 ...	40,246	77,874	26,699	2,563	39,345	...	186,627
1890-91 ...	41,806	74,970	21,984	2,503	39,036	...	180,299
1891-92 ...	41,806	74,110	22,423	2,513	36,211	452	177,686
1892-93 ..	36,591	67,728	21,225	2,829	32,201	878	160,962
1893-94 ...	12,051	61,259	10,491	2,052	15,802	1,868	103,526
1894-95 ...	21,606	65,482	13,771	2,581	14,432	1,689	122,561
1895-96 ...	25,672	65,936	13,859	892	10,115	4,996	119,460
1896-97†...	52,048	81,300	23,042	3,330	31,215	16,080	207,015
1897-98†...	50,304	75,811	22,052	3,243	29,193	14,999	195,602
1898-99†...	51,175	74,371	22,232	2,937	28,085	10,466	186,866

[These figures are given by the Public Works Department, the totals in column 8 are not in all cases correct.]

To explain the variations from year to year is a very difficult task. When the canals were first opened the people hung back, being timid and averse from any innovation, and they were also afraid that irrigation would be made an excuse for the enhancement of rents and revenue. To allay their apprehensions a proclamation‡ was published by Government in 1866, declaring the water rate to be wholly distinct from land revenue and promising that at the next revision of the Settlement no increased rate of assessment would be imposed on any lands by reason only of their being irrigated. These promises failed to produce much effect, and in 1877 they were withdrawn by the issue of a revised proclamation§.

A more effective inducement to take water was the gradual reduction of the rate from Rs. 5 or Rs. 3 per acre to Re. 1-8, a measure which was described by the Lieutenant-Governor, Sir George Campbell, as resembling a Dutch auction.

The result of this reduction in the rate may be seen in the steady increase of irrigation up to 1874-75, but why there was a falling off from 1874-75 to 1878 is not clear. The quinquennial system of five-year leases at Re. 1-8 and annual leases at Rs. 3 (and Rs. 2 for lift), and high prices and scarcity of water

* In Balasore District.

† Figures for actual irrigation, in previous years the assessed areas are given.

‡ Notification of 19th July, 1866.

§ See despatch No. 43 of 10th August, 1876 from the Secretary of State for India.

in 1878, the year of the Madras famine, account for the large area irrigated from 1878 to 1883. In the latter year most of the leases expired and were not renewed, so that there was a drop from 1,33,028 to 48,766 acres. Various reasons are assigned for the objection of the people to execute the leases, but I cannot do better than quote the opinion arrived at by the Commissioners appointed to enquire into the abuses of irrigation in 1884* :—

"In Orissa the normal rainfall being ample, the value of canal irrigation is exceptionally dependent on the character of the season. Cultivators frequently allege that they were in the first instance partly induced to take water leases by assurances of increased outturn, which have not been fulfilled; but in the opinion of many, and certainly in that of the Uriya peasant, the chief value of canal water lies not in any improvement which it may render possible in the outturn of an ordinary year, but in the protection which it affords against total or partial failure in years of drought. In the case of those high lands which cannot grow a late rice crop without canal water, these remarks do not apply."

"This being so, it is but natural that when water leases expire the cultivators should be disposed to put off renewing their engagements till a period of drought occurs; and when the hour of need does come there is a sore temptation to take water, without leasing, from neighbouring leased fields or other available sources, and so to avoid the necessity of paying Rs. 3 per acre for a single year or engaging for a period of five years in order to secure the lower rate of Re. 1-8. When a small number of leases expire, the difficulties arising from this tendency can be more or less readily met; but in Orissa, with the year 1884-85 the so-called five-year leases all expired together, and that under circumstances tending to increase the usual reluctance to renew. In three out of the preceding five years the rainfall had been sufficient and timely, and consequently the benefit derived from canal irrigation had been comparatively small."

Cultivators, penny wise and pound foolish as they are, soon began to realise that the loss of their crops from drought more than counterbalanced the saving of the water rate; the area slowly rose, and with the next quinquennial period a much large number of leases were executed and the maximum of 1,86,627 acres was reached in 1889-90. A few years of abundant and excessive rainfall brought the irrigated area down to 1,10,460 acres in 1896, when the drought of September to November created an universal demand for water and the irrigated area rose at a bound to 1,82,029 acres, and in the Irrigation Returns of 1897-98 is shown as 1,92,676 acres† out of a total irrigable area of 3,03,750 acres. In the following year there was a falling off in the area irrigated, due to less irrigation of *rabi* and *dahua* on the High Level and Jajpur canals. This is accounted for by the success of the *sarad* crop, which sufficed to support the cultivators in idleness through the cold and hot seasons.

The difference between leased, assessed, and irrigated areas is shown in the following table for 1898-99 :—

		Leased. Acres.	Assessed. Acres.	Irrigated. Acres.
Long leases	...	1,91,019	1,86,058	
Season leases—				
Sugarcane	...	624	624	
Autumn rice	...	113	113	
<i>Rabi</i> and <i>dahua</i>	...	5,122	5,054	
Total	...	1,96,878	1,91,849	1,89,860

The irrigated area excludes fields for which leases were executed, but to which water could not be, or was not, supplied. The assessed area excludes also *chaukidari jagis*, to which water was supplied free of charge.

In the Settlement records the total area recorded as leased for irrigation is in Cuttack 1,37,888 acres, and in Balasore 28,856, a total of 1,56,744 acres. The discrepancy is due partly to the exclusion of a large irrigated area in Darpan and partly to the fact that some of the Settlement figures are for the years 1895-96, some for 1896-97, and some for 1897-98, and that during every year the irrigated area has been rapidly increasing. It is likely to continue to increase until 1901-1902 when many leases fall in, and their immediate renewal will depend to some extent on the character of the season.

* Report; paragraphs 4 and 5.

† This is assessed area, which is less than the leased area shown above.

109. Enquiries into the comparative outturn of rice on wet and dry lands

Increase in productive power of land due to irrigation.

have been carried on for many years past. Mr. Boothby and Mr. Shore, of the Irrigation Company, estimated the yield of clean rice from irrigated land at 1,200 lbs per acre, or nearly double that from the unirrigated. These estimates were based on the results in the Godaveri delta, and were hardly applicable to Orissa. In 1872 Colonel Haig, one of the most eminent engineers who have made a study of the Orissa Canal System, estimated the average yield of the year on well irrigated light soils at 25 to 29 maunds of paddy per acre, while that of similar unirrigated lands was from 12½ to 14 maunds only. He also found the raiyats admit that on lower and stiffer soils irrigation, even in a year of heavy rainfall, would have raised the outturn from 27½ to 32½ maunds, because in the first place the crop would have been planted earlier and have been strong enough to withstand the heavy rain of June; and secondly, because the silty canal water would have enriched the soil.

Again, Mr. Wylly, the Canal Revenue Superintendent, gave the following abstract of his experiments; the figures are somewhat obscured by the nature of the year, crops on the lowest and best lands having suffered from excess of rain.

Place.	Class of land.	Irrigated. Mds. srs.	Unirrigated. Mds. srs.
High level canal	First class	Highest 18 0	17 0
		Lowest 11 24	8 0
	Second class	Highest 13 8	9 24
		Lowest 12 8	7 28
	Third class	Highest 8 12	6 25
		Lowest 8 4	5 28
Taldanda canal	First class	36 0	32 0
	Second class	33 16	19 8
	Third class	21 0	11 8
para ...	First class	Highest 25 24	20 22
		Lowest 18 13	11 0
	Second class	Highest 37 32	24 0
		Lowest 21 21	18 0
	Third class	Highest 34 32	28 0(a)
		Lowest 13 37	12 24

The results are expressed in standard maunds of paddy.
(a) Doubtful.

In Colonel Haig's note of 1877* he gives as the result of 783 experiments in 1878-79 the increased value of the paddy on irrigated land at Rs. 16-4-9 the equivalent of 15.69 maunds of grain. In the Mahanadi Division the difference in yield was 9.75 maunds of paddy, and in the next year the average difference was put down at 6.13 maunds of paddy.

The Irrigation Committee† of 1884, basing their opinions on the experiments of 1877 to 1884, assumed the difference between the outturn of wet and dry, i.e., unirrigated, land to be 5 maunds per acre, but were at the same time careful to guard themselves against generalising for the entire Province even on the large number of experiments before them.

It remains to see how far these conclusions are borne out by more recent enquiries.

In the decennial period of 1885-86 to 1896-97 the results of 428 experiments by officers of the Irrigation Department was to give an average yield for irrigated lands of 19.72 maunds of paddy and 28.17 maunds of straw, against an average for the unirrigated lands of 15.59 maunds of paddy and 22.02 maunds of straw. In the provisional estimate of the outturn of winter rice per acre submitted to the Government of India in 1898‡ the average yield of clean rice per acre was taken at 1,045 lbs. for irrigated and 602 lbs. for unirrigated land. For the four years 1895 to 1899 the average of the experiments made by officers of the Collectorate and Settlement staff gave an average for irrigated land of 1,996 lbs. of paddy, and for unirrigated of 2,003 lbs. per acre.

No. 1028 I. of 21st March, 1897, Colonel F. T. Haig, Joint Secretary to the Government of Bengal, in Public Works Department, to the Commissioner of Orissa, paragraph 24.

† Paragraph 41 of report.

‡ Director of Land Records and Agriculture to Government, No. 356 A, dated 3rd March, 1898.

It remains to be considered what the equivalent of paddy is in cleaned rice. This depends a good deal on how dry the paddy was when weighed. In Orissa it is the custom to give out the paddy in contract, the agreement being that for every 25 *gownis* of paddy 10 to 12 *gownis* of dry rice are returned. This rice, however, has a far greater specific gravity than the paddy, and in fact more than half weight is returned. The Irrigation Department have taken the weight of rice at two-thirds of that of the paddy, and in some experiments made by Babu Jamini Mohan Dass and Mr. Maude this weight was actually obtained; but as a rule, allowing for the paddy being slightly damp when weighed, I think five-eighths a safer proportion to take.

Thus we get as the result of those three sets of experiments last quoted:—

		WEIGHT OF CLEANED RICE PER ACRE	
		Irrigated.	Unirrigated.
		lbs.	lbs.
Experiments of Irrigation Department, 1885-96	...	1,014	802
Estimate sent to Government of India by the Director of the Department of Land Records and Agriculture, Bengal	...	1,045	902
Civil experiments of 1895-98	...	1,247	1,252
Average		1,102	985

The figures for the irrigated area in the first two sets of experiments are lower than those given in the earlier experiments of 1878—84, and I think that in the years 1885 to 1890 there must have been some confusion between weights of rice and paddy. On the whole we may, I think, assume the outturn at 13½ maunds or 1,110 lbs. for irrigated, and 12 maunds or 986 lbs. for unirrigated. The difference, 103 lbs., is worth at the average price of the last ten years, which is 18·23 seers to the rupee, about Rs. 3·4. Add to this the difference in the straw, about 28 maunds per acre in the irrigated and 22 to 23 maunds in unirrigated fields, and we get the additional value of the produce of irrigated fields at Rs. 4 in the case of *saral* rice.

The much greater difference between the yield of irrigated and non-irrigated land given in the estimates made by the Public Works Department as compared with the experiments made by other Departments may be put down to the fact that the former generally make their cuttings in an area where all the best lands are irrigated and where the exclusion of river silt, and systematic drainage have made an artificial supply of water most necessary. Outside this area the heaviest crops of all are those raised on lands rich in river silt; and in ordinary years the average outturn is not very much less than in the irrigated country. There is, however, a further correction to be made. The Commissioners appointed to enquire into certain abuses connected with the Orissa canals estimated the average annual loss from drought at one-twelfth of the crop, and that from floods at one-tenth.* Taking the minimum rainfall compatible with a successful harvest at 4 inches in October,† we find that in the thirty-nine years from 1860 to 1898 the fall in October fell short of this amount fifteen times in Cuttack, twelve times in Balasore, and six times in Puri, or an average of eleven times in thirty-nine years. We may assume roughly that once in four years a third of the crop will be killed by drought, thus entailing a loss to the cultivator of not less than one-twelfth of the crop, or Rs. 3 per acre per annum on an average, equal to Rs. 6,00,000 on the whole irrigated area. The saving of loss from floods is not I think to be credited against the cost of irrigation, but it may, perhaps, be credited to canal embankments, and may be put at the value of Rs. (5,00,000 × 1½ maunds) or about 1½ lakhs of rupees per annum.

* Report, paragraphs 42 and 62.

† See paragraph 107.

The total value to the cultivator of the *kharif* irrigation thus estimated is Rs. 4 per acre per annum, or about Rs. 7,40,000 for the Province, besides another Rs. 6,00,000 which may be credited to insurance against drought. I have not said anything about the facilities for growing a second crop on the land afforded by the copious supply of water, for against it may be set off the loss of *rabi* crops formerly grown on the silt-covered lands. Besides the *sarad* crop some 7,000 acres of *rabi* and *dalia* rice and perhaps 1,000 acres of sugarcane are irrigated; to both of these crops the water is of great value, and, indeed, they would often not be grown at all without it, but have no sufficient material for estimating the effect of irrigation on the outturn. I think we should be safe in estimating the value to sugarcane at not less than Rs. 15, and that to *rabi* at not less than Rs. 5 per acre; this would raise the total value to the Province of the canal water to Rs. 7,90,000, exclusive of the insurance.

Water rates.

110 The rates in force are as follows:—

				Per acre.		
				Rs.	A.	P.
Long leases (five years) for <i>kharif</i> —						
Flow	...	...	...	1	8	0
Lift	...	...	...	1	0	0
Water-logged land	...	...	...	0	8	0
Perennial crops (chiefly sugarcane)—						
Flow	...	...	...	6	0	0
Lift	...	...	...	4	0	0
<i>Rabi</i> —						
				0	8	0
Flow	...	...	...		to	
				2	0	0
				0	5	0
Lift	...	...	...		to	
				1	8	0

More than nine-tenths of the irrigated area is under long lease, and half of the sugarcane is said to be irrigated without extra charge. The total water rates for 1897-98 were nearly Rs. 3,15,000, which being deducted from Rs. 7,90,000 the estimated increased value of the harvest leaves a profit of Rs. 4,75,000.

111. The next question to be answered is, who ultimately gets the advantage of this increased value? Does the cultivator retain it all, or does the zamindar and therefore Government obtain a share? Amidst the mass of conflicting information on the subject of the increase of rent rates one fact alone can be held to be abundantly proved, and that is that the cases in which a zamindar has openly enhanced rents on the ground of the accessibility of canal water, or has imposed an irrigation cess of his own are very rare. I have heard of a few such cases, as in Taluk Raghunathpur of Kodinda, but they are certainly the exception, and I do not think that it is unreasonable to attribute this in some measure to the proclamation of 1866 to which the widest publicity must have been given.

At any rate the result is to reduce us to seek in a comparison of rates in different local areas and at different periods for circumstantial evidence.

The first figure to which we should naturally look is the incidence per acre of the rents of raiyats whose rents were liable to enhancement during the term of settlement, and it may be confidently assumed that the rents of the *pahi* raiyats of Orissa are so far competition rents that they would ordinarily be enhanced by the zamindars if there was any very decided improvement in the value of the land. I have therefore prepared the following table, placing opposite to one another irrigated and unirrigated areas which I considered fairly comparable, and have added explanatory remarks showing the factors which appear to have conduced to the differentiation of rents.

I have added the rate of *thani* rents of the last Settlement as showing what was then the high-water mark of assessment, and have prepared an explanatory map showing approximately the irrigated, protected, and flooded areas and the incidence of *pahi* rents in each.

PARGANA.	Per-centage of area irrigated.	LAST SETTLEMENT INCIDENCE PER ACRE.			PRESENT SETTLEMENT.		
		Pahi rents.	Thani rents.	Mafasal jama.	Settled and occupancy.	Mafasal jama.	
1	2	3	4	5	6	7	8
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Aureswar ...	35	2 5 6	3 12 6	2 2 4	3 4 8	2 14 4	Group A.—Irrigated parganas on the Kendra para system.
Sungra ...	51	2 7 9	3 14 2	2 8 4	3 6 2	3 2 4	
Matkatnagar ...	38	2 10 5	3 14 1	2 5 8	3 11 8	3 4 2	
Nahakhand ...	15	2 0 5	3 6 3	2 7 5	3 3 5	2 15 8	
Balubisi ...	5	2 8 11	4 1 4	2 6 7	3 10 4	3 3 1	Group B.—Unirrigated and mostly unprotected parganas on the north of the Mahanadi.
Suknai ...	1	2 3 8	3 2 2	2 3 3	3 5 7	3 0 4	
Abartak ...	...	3 2 9	4 13 0	3 0 5	4 0 11	3 10 9
Kusmandal ...	...	2 13 10	3 11 10	2 12 9	3 2 0	2 14 8
Paina ...	...	2 7 6	3 8 2	2 6 10	3 0 8	2 13 7
Padampur ...	46	2 6 2	2 14 8	2 4 9	2 15 6	2 11 5	Group C.—Irrigated parganas on the Kendra para Canal System.
Saraswati ...	53	2 7 9	3 6 2	2 6 0	3 8 1	3 3 0	
Karimul ...	56	2 0 1	2 12 11	1 14 10	2 15 9	2 10 10	
Suhang	2 0 9	3 6 1	2 0 11	3 0 11	2 10 11	Group D.—Inundated parganas at the head of Mahanadi.
Painda ...	4	1 14 11	2 15 6	1 9 11	3 1 5	2 6 8	
Kodinda ...	18	2 4 10	3 0 8	2 3 7	2 15 8	2 10 5	Group E.—Irrigated parganas on the Taldanda Mahanadi system.
Hariharpur ...	54	1 15 11	2 15 10	1 10 1	3 4 11	2 10 1	
Jhankar ...	47	2 7 3	3 7 0	2 6 4	3 0 9	2 12 0	
Kurania ...	11	1 15 3	2 9 8	1 9 11	3 3 3	2 9 4	
Khandi ...	21	2 7 11	3 13 0	2 4 6	3 6 9	2 14 1	
Gandito ...	34	2 1 2	3 3 6	1 11 5	3 4 3	2 8 1	
Deogaon ...	9	1 15 5	3 8 3	2 0 10	3 6 8	2 4 7	Group F.—Unirrigated and partially irrigated parganas on the Katjuhi river.
Kate ...	2	1 13 0	2 1 0	1 11 3	2 6 2	2 2 1	
Saibir ...	14	2 12 10	3 8 9	2 8 4	3 0 1	2 12 7	
Benahar ...	11	1 6 11	2 7 8	1 3 4	2 13 11	2 8 10	
Tirau ...	2	2 4 1	3 3 10	2 13 0	2 4 3	2 12 2	
Sailo ...	Nil	1 12 6	2 10 3	1 13 11	2 2 11	2 1 1	
Kokhuakhand ...	57	2 4 3	3 9 6	2 2 8	3 2 2	2 14 0	Group G.—Irrigated tracts on High Level Canal.
Kerunlkhand ...	36	3 1 1	4 5 10	2 12 0	3 6 2	3 1 11	
Kanchukhand ...	79	1 14 11	3 7 3	1 15 10	2 15 6	2 11 9	
Kuhunda Jaipur ...	4	1 8 3	3 2 2	2 1 5	2 15 11	2 10 7	Group H.—Unirrigated or partly protected parganas on Barua.
Alti ...	9	1 15 10	3 15 1	1 14 9	3 4 3	2 14 3	
Dihli Arakhpur ...	1	3 8 2	3 1 7	2 15 9	3 6 6	2 15 4	
Bargeon ...	Nil	1 11 11	2 6 4	1 14 2	1 11 4	1 14 1	
Jaipur ...	23	1 14 7	2 8 0	1 10 11	2 14 1	2 9 6	Group I.—Irrigated parganas on the Jaipur Canal.
Dolegram ...	46	1 8 3	2 4 9	1 4 7	2 10 11	2 8 9	
Tisania ...	10	1 12 9	2 3 5	1 7 3	2 14 2	2 5 2	
Katia ...	4	1 10 5	2 10 1	1 9 0	2 12 0	2 5 0	
Olas ...	1	2 5 0	2 15 8	1 12 0	2 11 2	2 6 8	Group J.—Unprotected parganas on the Prashmala-Kharua system.
Beruan ...	1	2 4 8	2 13 7	2 0 7	2 12 0	2 7 8	
Kalamatia ...	...	1 9 11	2 6 4	1 10 4	2 6 4	2 4 7
Hatimunda ...	...	1 7 3	3 1 3	1 9 1	2 15 8	2 9 0
Jodh ...	15	1 13 9	2 7 4	1 8 9	3 2 2	2 12 0	
Tikan ...	11	1 4 5	2 7 10	1 5 6	3 4 0	2 11 8	Group K.—Irrigated parganas on Godai and Patamudi Canals.
Chaudakulat ...	29	1 11 6	2 14 7	1 15 3	3 3 6	7 3 1	
Ahyas ...	8	1 11 0	2 8 5	1 8 2	2 5 1	2 0 2	Group L.—Unprotected areas in the Batarai Kharnua delta.
Bautaru ...	...	1 2 0	3 2 11	1 0 1	1 11 10	1 9 0
Bara ...	...	0 13 8	1 9 5	0 14 3	1 9 6	1 5 2
Kaima ...	1	1 14 6	1 12 10	1 8 8	1 9 4	1 7 7	

Groups A and B are fairly comparable, or perhaps more correctly the first three Parganas of Group A should be compared with Balubisi, Kusmandal, and Suknai, and Nahakhand with the other two.

Group A contains some of the Parganas that have been longest and most completely irrigated; they have also been drained, and canal water is now indispensable to their cultivation. At the last Settlement they were partly protected from inundation and were thickly populated and prosperous tracts. The mean incidence of their *pahi* assessment was Rs. 2-6, and of the *thani*, Rs. 3-12 per acre. The mean incidence of occupancy raiyats' rents has now risen to Rs. 3-6 per acre, an increase of Re. 1 per acre.

Babu J. N. Mitra, reporting on Asureswar, found no evidence of rise of rent rates directly due to irrigation, and considered that the protection had been of more value than the canal water. In Matkatnagar Babu N. C. Kar, while not finding any direct evidence of enhancement, was of opinion that but for irrigation so high a rate could not be paid. This is doubtless true, though at the last Settlement *thani* raiyats were paying a higher average of rents than *pahi* tenants do even now. In Nahakhand the assessing officer, Babu Hira Lal Banerjee, wrote:—"There is not much reason to suppose that the rent rates have risen in consequence of canal irrigation. I consider, however, that it has benefited the zamindar by enabling him to bring lands under cultivation and by securing the crops from the bad effects of deficient rainfall."

The fact appears to be that this part of the country was already prosperous and highly assessed, and while some benefit has undoubtedly been caused, it is rather by insurance against loss than by direct enhancement of the productive power of the land, and this will be borne out by an examination of the figures of Group B.

These latter villages lie between the Mahanadi and the Kendrapara Canal.

Only a small portion of them is irrigated, but they are, to a great extent, protected against ordinary floods, and it is only the lower end of Suknai and part of Paina that suffer seriously from inundation. They contained the homes of many well-to-do persons, and were at the last Settlement even more highly assessed than Group A. The mean incidence per acre of *pahi* rents has risen from Rs. 2-10 to Rs. 3-7, or by As. 13 as against an increase of Re. 1 in Block A. Considering that besides irrigation and protection, Block A enjoys far greater advantages in the form of roads, post offices, and communications generally, there is very little ground for attributing much of the increase in Block A to irrigation.

Further, in Balubisi itself, the southern half is protected and irrigated, the northern exposed to the floods of the Mahanadi and Nuna rivers. The extension of cultivation and increase of rent rates in the irrigated and unirrigated area are compared in the following table:—

	Percentage of increase of cultivation.	INCIDENCE OF <i>thani</i> RENTS.		INCIDENCE OF <i>pahi</i> RENTS.	
		Last Settlement.	Present Settlement.	Last Settlement.	Present Settlement.
Balubisi I. (48 unprotected estates).	66	4-8	4-8	3-3	3-8
Balubisi II. (Unprotected)	8	3-14	3-1	2-12	3-2
Balubisi II. (Irrigated) ...	22	3-9	3-6	2-4	3-0

The increase of cultivation and of rent rates is greater in the irrigated than in the immediately adjoining unirrigated villages, but the rents are lower; while in the unprotected villages, a little further north, there has been a still greater extension of cultivation and rents are much higher.

There is nothing to show that irrigation has caused any great rise of rent rates or extension of cultivation, though it has affected, to some extent, the nature and number of the crops grown on the irrigated areas.

The third group consists of Parganas, which at the last Settlement, though favourably situated close to Cuttack, were liable to flood. They are now, for the most part, protected and irrigable. Their condition has been greatly improved, and the mean incidence of the *pahi* assessment has risen from Rs. 2-5 to over Rs. 3-2 per acre, or to a little more than the mean incidence of *thani* rents at the last Settlement.

In Saraswati the assessing officer, Babu Hira Lal Banerjee, reported that the incidence of rents varied generally according to the proportion of irrigated land, and in Padampur Mr. Carey found evidence of a very marked rise in rents since the introduction of irrigation. He compiled the following figures for seven selected villages:—

		1276 U., corresponding to 1869 A.D.			1281 U., corresponding to 1874 A.D.		
		Acres.			Acres.		
Total <i>pahi</i> area	...	543			558		
		Rs. A. P.			Rs. A. P.		
Total <i>pahi</i> rent	...	1,708	0	0	1,825	0	0
Incidence per acre	...	3	2	4	3	4	4

This shows a considerable enhancement of rents at the time when water was first introduced, but it is not said whether any distinction was then made between wet and dry lands.

The Parganas of Suhang and Paenda are, like those last mentioned, situated in the forks of branches of the Mahanadi, but unlike them, instead of being protected by embankments, form part of the spill area. Nevertheless, and in spite of their comparative inaccessibility, the mean incidence of *pahi* rents has risen from Rs. 2 to Rs. 3-1 per acre. That is more than in the comparable irrigated Group C.

In the group marked E, I have included all the principal Parganas between the Machgaon and Taldanda Canals, omitting only Benahar and Tiran, to which distributaries have so recently been extended that it is out of the question that irrigation should have much, if at all, affected rents. These Parganas were, at the last Settlement, partly protected, but suffered much for want of roads. Now they are protected and irrigated, and have a better system of roads than almost any other part of Cuttack, to say nothing of the facilities for transport offered by the canal.

The mean *pahi* assessment on this block shows an increase from Rs. 2-3 to Rs. 3-3 per acre. *Thani* rents at the last Settlement averaged Rs. 3-3 per acre.

In Kodinda rents are slightly lower than in the other Parganas, because some villages are still unprotected and unirrigated and others have suffered from heavy deposits of sand due to the breaching of embankments from thirty to forty years ago. It is really in this Pargana that we find the clearest indication of rents having been raised by irrigation; and though the papers of the estate do not show it, it is said that in Taluk Raghunathpur some of the enhancements were in fact made openly on the ground of the introduction of canal water. Soil maps were prepared for this area, and they showed that though some attempt had been made to readjust rents according to the altered classification of soils brought about by irrigation, still rents were far from being proportionate to the relative productive power of the best and worst lands.

In Hariharpur also more figures were available than in most parts, and very careful enquiries were made. The people themselves asserted that the injury due to the drainage cuts taken with the water rates more than swallowed up the whole profit of the increased outturn. This is manifestly untrue, but no enhancements of rent rates on account of irrigation could be found, and Mr. Carey, after an examination of the information collected, summed up the results in the following terms:—"I think we must consider the chief benefit of irrigation in this Pargana to be security from drought when the rain fails."

Much the same results were arrived at in Gandito and Kurania and Jhankar. In Khandi, formerly a remote and wild tract, there has been the most marked increase, but it is to be attributed more to protection and to improved communications than to irrigation. To sum up, while rents have risen largely in this block, the reporting officers have failed to find any direct evidence of enhancements on account of irrigation. I am, however, satisfied that though protection and improved roads may account for most of the increase, some share in it must, at least in Hariharpur, Kurania and Kodinda, be attributed to irrigation.

To the right and at the end of the Machgaon Canal lie the Parganas of Group F. The first three are all partly protected and irrigated, but the irrigation is of so recent a

date that it has as yet had no effect upon rents, and the bulk of this area is more heavily flooded than formerly owing to the restriction of the spill area by the canal embankments. The flooded area is, however, rather a *rabi* than a rice-growing tract, and comprises the poorest as well as the richest soils in the District.

On the group the mean incidence of *pahi* rents has risen from Rs. 2 to Rs. 2-11, while the mean of the *thani* rents at the last Settlement was Rs. 2-15.

As I have said, Kate and Saibir both contain a protected as well as an unprotected area, and in both there can be little doubt but that the construction of the canal embankment (the Daib left) has greatly benefited the protected at the expense of the unprotected area, though there is no evidence of an increase of rates of rent in either. The following figures bear out this conclusion :—

Pargana Kate—

		At last Settlement.	At present Settlement.
		Acrea.	Acrea.
Cultivated area—			
Protected	...	1,447	2,219
Unprotected	...	1,637	3,091
		Rs. A. P.	Rs. A. P.
Incidence of <i>thani</i> rents per acre—			
Protected	...	2 10 0	2 8 0
Unprotected	...	3 7 0	4 3 0
Incidence of <i>pahi</i> rents per acre—			
Protected	...	1 13 0	2 5 0
Unprotected	...	2 9 0	2 1 0

Pargana Saibir—

		Protected area.	Unprotected area
		Per cent.	Per cent.
Proportion of the waste lands at the last Settlement reclaimed up to now		56·53	51·98
		Acre.	Acre.
Average size of a plot ...	...	·25	·34
		Acrea.	Acrea.
Average size of a holding	...	1·37	1·68
		Rs. A. P.	Rs. A. P.
Average selling-price of land per acre during the past ten years—			
(a) <i>Lakhiraj Bahal</i>	...	132 6 4	97·8 0
(b) <i>Basyafti</i>	...	98 10 5	80 1 10
(c) <i>Thani</i>	...	41 3 9	40 4 6

	Assessed area.	Rent.		Incidence.		Assessed area.	Rent.		Incidence.	
	Acrea protected.	Rs.	A.	Rs.	A.	Acrea unprotected.	Rs.	A.	Rs.	A.
Development of rents (including <i>lakhiraj</i> <i>basyafti</i> and lands held by proprie- tors)—										
At last Settlement	4,568·56	14,238	2	3 2	2,530·45	8,116	0		3	
As now Settled	7,047·58	22,671	7	3 3	4,847·23	13,820	12		13	

Sailo is a Pargana in which more valuable crops were grown before the construction of the protective embankments, and that is the reason for the comparatively low rates and small increase.

Tiran and Benahar are partly protected and irrigated, but irrigation is too recent to have affected rents, and a considerable area in both is liable to inundation by the drainage cuts and the brackish water of the tidal creeks.

On the whole, it may be said that rents have risen more in Group E than in Group F, and though the difference is due rather to protection, to accessibi-

lity, and to the quality of the soil, than to irrigation, yet some credit for it must be allowed to the facilities for obtaining canal water.

On the left bank of the Birupa lie the three Parganas of Kokhuakhand, Keruakhand, and Kanchikhand. Even at the last

Group G.

Settlement they were, for the most part, free from inundation, and the rice lands could be watered from the hill streams flowing down through Dalijora.

They are now partly irrigated by the High Level Canal and the mean incidence of the *pahi* assessment has risen from Rs. 2-7 to Rs. 3-3 per acre.

In Keruakhand the average of rents was very high at the last Settlement, partly owing to the large area of homestead land, and a careful scrutiny of the village figures shows that where rents were already high, they have not been influenced by irrigation, and though they have risen largely in a few villages, the rise is almost the same for irrigated and unirrigated lands. In Kokhuakhand canal water is taken generally in the villages which were formerly most lightly assessed, the others being already irrigated from tanks and streams. In the former group the average incidence of rent has risen from Rs. 2-8 to Rs. 2-15 per acre, and in the others from Rs. 3 to Rs. 3-7. Mr. Carey, in his report, points out that within the canal irrigated area the rise of rents is greatest in those villages in which the percentage of the area irrigated is greatest, but this fact might, to some extent, be accounted for by the natural tendency of the lowest rents to rise most. On the whole I think that in this group the effect of irrigation has been to improve the worst lands and to level up the lower rents.

In Group H I have included the Parganas lying on the Birupa and Kimeria rivers and forming the most disastrously

Group H.

flooded tract in the Province. The Birupa is confined by embankments, and in flood time is banked up against the waters of the Kimeria and the hills of Alti, so that the flood covers Kuhunda Jaipur, and part of Dihli Arakhpur and Alti for days at a time.

The mean incidence of the *pahi* rents in the group has risen from Rs. 2-3 to Rs. 2-14, but we may exclude the two small Parganas of Bargaon and Dihli Arakhpur, the circumstances of which are peculiar, and consider only the other two. They were both much over-assessed before the last Settlement, and though reductions were then made, it is probable that the assessment was still heavy. Nevertheless, we find the incidence of *pahi* rents in Kuhunda Jaipur nearly doubled, and that in Alti increased by more than Rs. 1-4 per acre. Part of Alti is indeed protected and irrigated, but rents are no higher in these villages than in the unprotected area, and Babu N. C. Kar, who spent two years in these parts, reported that he could find no evidence that in this Pargana irrigation or protection had caused any extension of cultivation or enhancement of rents.

In Group I are included the four principal Parganas protected by the

Group I.

Baitarni and Bura Kharsua embankments and irrigated from the Jajpur Canal.

As a reference to the statement of irrigated areas will show, the extension of irrigation is too recent to have much affected rents, but the canal embankments have made a great change in the agricultural conditions of the country. The mean incidence of *pahi* rents in this area has risen from Rs. 1-12 to Rs. 2-13. The protection, though on the whole beneficial, has had its drawbacks, and it is not easy to say how much of the increase is due to it. No direct evidence of enhancement of rent rates on account of protection or irrigation was found, and I do not think much can have been made.

Block J contains the Parganas on the right bank of the Kharsua, the floods in which have been aggravated by the protection

Group J.

afforded to the last-named group.

Nevertheless the rise in the mean *pahi* incidence is from Rs. 1-14 to Rs. 2-13, or almost the same as in the last block. At the last Settlement, indeed, the assessment of these Parganas was higher than in Group I, but in Olas at least the *thani* rents were too high, for the tenants refused to accept their *pattas*.

In Group K are two Parganas which have benefited by irrigation, but much more by protection and drainage. They

Group K.

show the largest increase in rent rates of any of

the groups, but no evidence could be found of higher enhancements in the irrigated than in the unirrigated lands.

We may, however, safely assume the enhancement of rent rates in these Parganas on account of irrigation at not less than As. 8 per acre.

It will thus be seen that there is little, if any, evidence of general enhancement of rents on the ground of irrigation or of higher rates in irrigated than in unirrigated

Summary. villages, though there is evidence that rent rates have risen more in the protected and irrigated tracts than in the unprotected and unirrigated. There is, however, some reason to think that irrigation causes the lowest rents to rise, and in fact has a tendency to equalise rents throughout an irrigated area. Of course if there has been a greater increase of cultivation in the irrigated area, this would in itself serve to veil any rise of rent rates.

112. The following figures may be examined:—

Name of group.	Percentage of area assessed at last Settlement.	Percentage assessed at this Settlement.	Difference.	Name of group.	Percentage of area assessed at last Settlement.	Percentage assessed at this Settlement.	Difference.
A	66	81	15	G	54	66	12
B	59	72	13	H	50	73	23
C	47	69	12	I	62	81	19
D	53	65	12	J	55	76	21
E	62	72	10	K	60	81	21
F	53	73	20	L	68	76	8

It will be seen that the increase of cultivation is certainly no greater in the protected and irrigated groups, and all the enquiries made have failed to elicit any evidence of a substantial extension of cultivation to lands which but for the canal water were not likely to have been reclaimed. It is of course certain that some lands, such as the sand-damaged areas in Kodinda have been reclaimed, which, without canal water, would not pay for cultivation, but on the other hand there are high lands which would probably yield better crops in flooded than in irrigated areas. Irrigation can only reach comparatively low lands, and these can almost always be reclaimed. The people are generally too lazy to use lifts for reclamation of poor lands. The effect of protection without irrigation is rather to restrict than to increase the extension of cultivation.

113. Up to date some 468,000 acres have been provided with distributaries, but of this only, some 229,000 acres are likely to be irrigated.* Out of this, some 195,000 acres are now irrigated, leaving a margin of 36,000 acres.

It is probable that there will be a large extension of irrigation in Parganas Benahar and Khandi on the Taldanda-Machgaon System, in Tikan, on the Kendrapara Canal, in Jajpur, Dolgram, Katia, and Ahyas on the Jajpur Canal. It is, however, very difficult to foretell what may happen when the existing leases fall in, and so much depends on the chance of the seasons that I will not venture to make an estimate of the area likely to be irrigated.

114. Whatever opinions they may have as to the effect on rent rates, all officers engaged on fair-rent work are unanimous in reporting that protection and irrigation have greatly improved collections. The committee appointed to enquire into various matters connected with the Orissa Canals calculated (paragraphs 42 and 62 of their report) that on an average one-tenth of the annual crop was destroyed by floods and one-twelfth by drought. This should entail corresponding remissions of rent, and we should accordingly find the value to the zamindar of the protection by canal embankments to be 10 per cent. of the rental, and of protection and irrigation over 18 per cent.

This is clearly too high, for it is only in a very few areas that collections fall so low as 82 per cent.

The average collections, as calculated from the figures given in the completion reports, are in Cuttack 94 per cent. and in Puri, which is mostly flooded and

* See Revenue Report for 1898-99. Paragraph 19 of Report on Orissa Canals.

liable to drought, 92 per cent. In Balasore, where rents are lower, Mr. Kingsford estimates collections at about 85 per cent: probably something less than 90 per cent. is collected; that is, 90 per cent. of a nominal demand, which is considerably more than the landlords expect to collect. Taking unprotected and partially-protected Parganas we find—(the figures are for a few estates only in most cases)—that the collections are returned as follows:—Paenda, 95 per cent.; Kato, 87 per cent.; Kodinda, 81 per cent.; Hatimunda, 95 per cent.; Apilla, 98 per cent.; Alti, 91 per cent.; Bardiala, 105 per cent.; Kuhlunda-Jaipur, 43 per cent.; Suhang, 61 per cent. In the last two Parganas the figures are for one estate only and for a period when the crops were destroyed by floods. Bardiala is a problem, as it is both highly assessed and heavily flooded; the management is exceptionally good.

Among irrigated and protected Parganas we find Matkatnagar, 98 per cent.; Saraswati, 96 per cent.; Kanchikhand, 98 per cent.; Tiran, 108 per cent.; Hariharpur, 98 per cent.; Keruakhand, 94 per cent.; Khandi, 99 per cent.; Koronia, 94 per cent.; Padampur, 92 per cent.; Karimul, 94 per cent.

My general conclusion is that from 85 to 95 per cent. is collected or should be collected in unprotected and over 95 per cent. in protected and irrigated areas. The difference in collections may range from 5 to 10 per cent. on an average for the district of Cuttack. The balance of the loss appears to be borne by the cultivators.

In Balasore the area at present irrigated is too small to draw any conclusions.

115. To decide to what extent the Government has been recouped for its expenditure by the larger land revenue obtained Profit of Government from at this Settlement, I would ask that the following Irrigation. table should be considered. The letters refer to the grouping of Parganas made for the statement of incidences in paragraph 110.

PROTECTED AND IRRIGATED.						UNIRRIGATED.					
NAME OF GROUP.	Land Revenue, last Settlement.		Land Revenue, present Settlement.		Increase per cent. of land revenue.	Name of group.	Land Revenue, last Settlement.		Land Revenue, present Settlement.		Increase per cent. of land revenue.
	Per cent.	Amount.	Per cent.	Amount.			Per cent.	Amount.	Per cent.	Amount.	
1	2	3	4	5	6	7	8	9	10	11	12
		Rs.		Rs.				Rs.		Rs.	
A ...	63	78,928	54	1,12,981	43	B ...	63	59,076	55	84,136	42
C ...	63	23,918	55	34,220	43	D ...	65	19,984	53	28,794	44
E ...	63	90,880	56	1,25,320	38	F ...	62	84,558	53	1,33,017	57
G ...	66	19,783	56	24,497	25	H ...	64	45,538	52	74,300	63
I ...	65	68,333	52	1,10,025	74	J ...	64	61,627	51	95,185	56
K ...	64	20,417	52	42,905	110	L ...	66	50,175	54	75,583	51
Total	64	2,97,059	54	4,49,948	51	Total ...	64	3,20,358	53	4,91,019	53

There is apparently no great advantage to Government in the increase of revenue in the protected and irrigated tracts. There is a difference of only 1 per cent. in the percentage taken, while the gross increase is greater in the unprotected Parganas. This is due to two causes; firstly, the very narrow limits of the discretion left to the Settlement Officer in the percentage of the assets to be taken as revenue (50 to 55 per cent.) and the very strict interpretation by the Board of Revenue of the Secretary of State's orders; partly also to the limitation on enhancements of revenue imposed by the necessity of considering the proprietor's income. I am myself of opinion that if the zamindars of the flooded tracts can pay an average of 53 per cent., as they can, those of the protected and irrigated Parganas could as well have afforded to pay 58 to 60 per cent., though a *rasadi* increase would have been necessary in many cases. My proposals for taking more than 55 per cent. in the irrigated and protected areas would have been much more frequent than they were, but

for the fact that, in addition to the benefits of irrigation, I could not point out other reasons for taking more than 55 per cent. as revenue. As revenue has been settled we may, perhaps, credit one quarter of a lakh, or at the outside half a lakh, of the increase directly to protection and irrigation.

The other sources of profit to Government from canals and their embankments are three in number: (1) Irrigation receipts, (2) Navigation receipts, (3) Saving of remissions.

The first two sources of revenue attained their maximum in 1897, when, for the only time since their construction, the receipts more than paid the working expenses of canals. Previous to 1866 the average annual remissions of revenue on account of floods and drought were in Puri Rs. 27,000 and in Cuttack Rs. 62,000. Since the great famine there have been none, but this I attribute rather to the smaller proportion now borne by revenue to rents than to protective measures. Were it otherwise we might have expected to find remissions of revenue in Puri, though not in Cuttack; but I think, we may put to the credit of irrigation and embankments an annual sum of Rs. 30,000 on this account. If the embankments were now abandoned, the loss would probably be many times greater, but the estimate represents what might have been expected to be remitted, had embankments remained as they were in 1860.

The account for irrigation works then stands as follows. I give both 1897-98 and 1898-99:—

	1897-98.	1898-99.
	Rs.	Rs.
Working expenses: direct and indirect	5,39,900	4,95,200
Interest of 4 per cent. on capital ...	10,27,500	10,30,200
Total Charges ...	15,67,400	15,25,400
Receipts for irrigation ...	3,14,700	2,72,400
Ditto navigation ...	2,11,300	1,72,700
Ditto miscellaneous ...	28,700	24,500
Deduct Refunds ...	—2,800	—4,100
Total Direct Receipts ...	5,51,900	4,65,500
Add estimated gain in new revenue due to the canals ...	25,000	25,000
Add estimated saving in remissions ...	30,000	30,000
Grand Total Revenue from canals ...	6,06,900	5,20,500
Nett deficit of the year ...	9,60,500	10,04,900

These figures take no account of agricultural embankments, nor of embankments in Balasore. On agricultural embankments the average expenditure from 1878-79 to 1897-98 was Rs. 1,04,600, and there are no direct receipts, though it may be taken that it was necessary to the security of the revenue. When the canals were begun it was anticipated that there would be a large saving in the expenditure on other embankments, but so far there has not been much, as will be seen from the following statement:—

Average annual expenditure on agricultural embankments in Cuttack.

Period.	Amount.	Period.	Amount.
	Rs.		Rs.
1839—45 ...	10,800	1867—76 ...	88,400
1846—52 ...	13,700	1877—86 ...	48,800
1853—59 ...	40,800	1887—96 ...	53,900
1860—66 ...	59,200		

It is clear that the amount expended can never be recovered by Government, although, as estimated in paragraph 109 above, the gain to the people may be taken as equal to over 13 lakhs per annum in the irrigated area and 26 lakhs on the whole district of Cuttack, and probably over 40 lakhs of rupees on the province.

Permanently-settled areas.

116. The irrigated tracts which are permanently settled comprise Parganas Madhupur, Darpan, Chhedra, and Derabisi.

In Madhupur the irrigated villages differ much from the others, and rents had so long been left unadjusted and areas were so doubtful that no comparison could be made of rates for irrigated and unirrigated land.

In Chhedra records were attested long ago, and there are no figures from which any conclusion as to the effect of irrigation can be drawn.

In Darpan an enquiry was made by Mr. A. C. Sen, and his figures were criticised in Mr. Maude's letter No. 2399, dated 16th November 1893. Briefly, the results were that the extension of cultivation and rise of rent rates did not appear to have been accelerated by irrigation. This may be accounted for by the great impulse given to extension of cultivation by the opening up of communications through the unirrigated tract which obscured the effects of irrigation, and there is no doubt that the increase of rents in Darpan is due in no small measure to the canals.

Derabisi requires a longer notice, having already formed the subject of two reports by Babu Jamini Mohan Das.

In the former report Babu Jamini Mohan Das, basing his conclusions on the figures for a small group of villages in the south-west of the Pargana, came to the conclusion that the lands might be divided into three blocks.

(1) Directly improved by irrigation. These were formerly *chhoti laghu* (see paragraph 128) and *biali* lands now growing two crops.

(2) Middle class *sarad* lands in which irrigation made little improvement.

(3) Lowlands, now overflowed by the canal water.

He analysed the present rates in the three classes, or rather the average rate for each class.

He assumed that, but for irrigation, the rates would have been equal, and on this doubtful basis argued as to the effect of irrigation. The premises being unreliable and there being no means in the absence of the old *khasras* and *khatians* of ascertaining the previous rate, the calculation was rejected by the Director of Land Records.

The Assistant Settlement Officer now reports that, with the exception of the south-western corner, the Pargana is unsuitable for irrigation; that more than half is too low or too high, and that there is little prospect of much extension of irrigation beyond the present area, which is 21 per cent. of the cultivated land.

I do not quite agree, for I think some of the *pdls* might be first drained and then irrigated, but the question is outside the scope of this enquiry.

The comparison of rates plot by plot before and after irrigation has been abandoned, the *khaurias* (khasras) not being produced and the *bhians* (rent-rolls) of different periods so variously prepared that they are not comparable (see paragraph 7 of the report). There remain therefore but two methods:—(a) Comparison of the rental and incidence of rents in the same village at different periods; (b), Comparison of the incidence of rents in irrigated and unirrigated villages.

To begin with (b), it is shown in Babu J. M. Das' report (paragraphs 4 to 6) that rents are not now markedly higher in the irrigated than in the unirrigated villages.

For the purpose of comparison of rents at different periods the areas and rents in the *jamawasilbaki* (collection papers) and *ekpadia bhians* (rent-rolls) filed have been totalled and compared with the attested records.

The first point thus brought out is the very much larger areas shown in the *khatians* than in the zamindar's papers. The following villages taken at random are sufficient to show this:—

VILLAGE.	Per cent. irrigated.	AREA ACCORDING TO ZAMINDAR'S PAPERS.		Area accord- ing to khatians.
		Year	Area.	
Arakhand	72 1878	163	181
Balbhadrapur	36 1878	313	338
Borpailo	30 1892	121	161
Benipur	37 1886	250	281
Nahang	31 1881	191	233
Jagannathpur	25 1887	180	232
Bilemgheri	16 1892	425	145
Despur	80 1898	107	119
Dhol	58 1893	467	611

I conclude from this that there has been extension of cultivation, but that it was not generally shown in the *jamawasilbaki*, as it was very much to the interest of the *mustajir* (lessee) to conceal it.

As to rents I fear the figures are not such as to warrant any conclusion. Taking such as on the face of them appear reliable, we get the following instances of increase since the date of introduction of irrigation :—

VILLAGE.	Percent- age of irrigation.	Date of first introduc- tion of canal water.	RENT BY ZAMIN- DAR'S PAPERS.		1895-99. Attested rental.	Approximate year of enhancement.	REMARKS.
			Year.	Amount.			
1	2	3	4	5	6	7	8
				Rs.	Rs.		
1. Arakhand ...	72	1873	1870	344	512	1880-5	Rents low.
2. Despur ...	80	...	1876	393	506	1880	The figures are a little suspicious.
3. Kanderpur ...	62	1878	1881	507	611	1885	
4. Barahilo ...	30	1873	1876	335	422	1891	
5. Chasakhand ...	52	1873	1882	307	372	1890	
6. Dhol .	58	1878-91	1884	1,137	1,431	Continuous	
7. Balia ..	47	1873	1872	501	559		
8. Dorbol ...	33	1873	1869	335	389	Possibly be- fore intro- duction of irriga- tion.	
9. Bonipur ...	37	1873	1877	840	845	.....		A much larger in- crease before 1877. A large increase be- fore irrigation. Area also decreased. Ditto. Area increased.
10. Waukhand ..	52	1869	1865	457	513	.....
11. Jagannathpur	25	1878	1877	452	538	...	
12. Nahang ...	31	1878	1881	556	573	.....
13. Nilkanthapur	50	1873	1879	894	879	.....
14. Nurkhanpatna	20	1878	1869	124	122	.....
15. Bazan ...	43	1873	1888	271	253	.....
16. Gopinathpur...	71	1869	1892	418	407	.....
17. Sunderpur ...	98	1872	1882	149	146	.....
18. Raipur ...	33	1877	1878	825	816	.....
19. Beruan ...	Nil	...	1885	930	916	Reached a maxi- mum of Rs. 863 in 1882.
20. Nagaswarpur	Nil	...	1869	461	332	Marked decrease in area.
21. Mangrajpur ...	Nil	...	1879	133	133		

The largest increase is found in the first six villages, where irrigation is largely practised. The next six villages though irrigated show only a normal or less than normal increase.

The last nine are instances of an actual decrease.

On the whole the figures appear to bear out the theory that the increase is greater in the irrigated villages, but there are marked exceptions as Nilkanthapur and Sunderpur.

The figures for Gopinathpur are too recent to be of much value.

It is impossible to estimate how much of the increase is due to irrigation, or would not have been but for irrigation. The Assistant Settlement Officer reporting does not consider that the facilities for obtaining canal water have caused a rise of rents, but it appears to me that the figures compiled do warrant a conclusion that some part at least of the increase in rents is due to irrigation.

How far the figures are reliable is another question: there is certainly reason to distrust some of them, and the Assistant Settlement Officer places no great reliance on any.

In conclusion, I would say that these reports have added very little to our previous information. It was not to be expected that they should, as in temporarily-settled areas, with far more reliable figures to work on, the officers employed had failed to prove anything definite.

117. Having set forth the results of the enquiries made, I am now in a position to answer the questions put by the Director.

Conclusions.

(1) Has there been a rise of rent rates due to irrigation?

There has been a rise owing to the improvement in lands which previously suffered for want of water, but enhancements on the specific ground of the value of the lands having been increased by irrigation are very rare and in no case proportionate to the increased outturn. This is, in my opinion, to be accounted for—*firstly*, by the restraining effect of the proclamation of 19th July, 1866; *secondly*, by the fact that rates in Orissa are not calculated upon a strictly economic basis, so that they never do increase in proportion to the increased value of the produce, and a raiyat in possession of second class lands changed by irrigation into first class, will actually pay, in the form of rent and water rates, as much as the owner of unirrigated first class lands yielding an equal crop; *thirdly*, that a great deal of the irrigation is very recent and that zamindars have abstained from enhancements in view of the pending settlement; *fourthly*, that the lands on the Taldauda and Kendrapara Canal systems, in which irrigation first became general, were among the richest in the Province. They were in no great need of irrigation, and rents were already very high.

No estimate can be made of the amount of the enhancement due to irrigation, but in most areas it is certainly small in comparison with the total increase due to growth of population, higher prices, and improved communications.

These alone would suffice to account for the whole increase in rents and more. I may add that nominal rent rates have in hardly any areas risen above those shown in the *thani raiyats'* rent rolls (*bhians*) at the last Settlement. Rents are raised not by enhancement of rates, but by re-classification of lands; and to complete this enquiry, it would have been necessary to make soil maps and to show against the present fields the numbers and rent rates at the last Settlement. The attempt to indentify last Settlement fields was discontinued at an early stage of the Settlement, and though a comparison has actually been made in one or two selected villages, it has produced no definite result.

(2) Has there been owing to irrigation an extension of cultivation to lands that would not otherwise have been reclaimed?

It is certain that in some localities there has been a small increase on this ground, but it is almost negligible in comparison with the general increase in the Province and no direct evidence on this point has been obtained. There are lands in many Parganas now cultivated with the help of canal water that apparently could not be cultivated without it, but the face of the country has been so changed by the embankments that it is impossible to say that if these had not been constructed, crops could not have been grown.

(3) To what new areas is water likely to be extended during the term of Settlement from canals now existing?

There is likely to be a considerable extension in Jajpur and Tirtol Thanas and in the neighbourhood of Kendrapara, but the extent cannot safely be estimated.

(4) What enhancement of rent rates has been due to the construction of canal embankments?

There has been an undoubted increase in certain areas, such as Tikan, Chaudakulat, Saibir, Kate, but it is in some measure at the expense of lands outside the protected area. Perhaps we may take annas 3 per acre as representing the increase on the 5,00,000 acres of country protected by these embankments which may be attributed to the protection and irrigation of the canals.

(5) What extension of cultivation has then been due to the canal embankments?

Generally there is none. Probably in Tikan a good part of the increase may be attributed to this source.

(6) What effect have the canal embankments had on zamindar's collections?

I think that to irrigation and protection, combined as they are, a difference from 5 to 10 per cent, or say annas 4 per acre, may be attributed; certainly not less on the whole than 5 per cent, and probably not as much as 10 per cent.

but now that rents and revenues have been enhanced, I think that practically full rents will be collected in irrigated and about 90 per cent. in unprotected and unirrigated areas. I mean of course that these collections will be made on an average deduced from a number of years.

118. It appears to be the present intention of Government to be content with the enhancement of land revenue in the case of temporarily-settled estates, and to abandon both the original proposal to limit the term of Settlement to fifteen years in the case of lands accessible to canal irrigation (letter No. $\frac{1280}{170}$ from the Government of India to the Government of Bengal) and the suggestion to extend the owner's rate to lands which may become irrigable during the term of Settlement (Government of Bengal to the Board of Revenue, No. 90 T.—R., dated the 25th May 1894).

As to this second proposal, I would, however, as it has not been definitely overruled, beg to point out that it is most unfair to the occupiers of the lands it would affect. There is but little, if any, difference between the incidence of revenue in the irrigated and in the protected but unirrigated areas, and, as I have shown, the enhancement of rents due to irrigation in the former is very small, and only a very small part of the increase in revenue in irrigated areas can be attributed to irrigation. If a rate is to be imposed at all, it would be better to take 5 per cent. on all estates in the protected area, even though this might in some cases press hardly. I think that it would not be unfair to adopt the original proposal of Colonel Gulliver and impose a cess of eight annas per acre on all protected lands. This would bring in about 2½ lakhs, and would represent but a fraction of the benefit enjoyed by raiyats and zamindars.

In the permanently-settled estates an assessment of four annas per acre protected by canal embankment would be more than covered by enhancement of rents, extension of cultivation, and increased collections.

CHAPTER VI.

AGRICULTURAL INFORMATION.

119. A comprehensive account of the Agriculture of Cuttack has been written by Mr. Banerjee of the Agricultural Department* and notes on the principal crops have been written by Mr. Arnott, of the Public Works Department, and by Messrs. Nathan and Walsh, when Assistant Settlement Officers in Puri.

There is therefore little new information to be given, and this chapter can be but little more than extracts from the existing reports, to which I would refer those requiring further details.

120. The first point to be considered is the nature of the soil. The cultivators of Orissa recognise a large number of different classes of soil, each having a name of its own which may vary in different localities. In an ordinary village the lands fall primarily under three main divisions, according to their situation, viz.—

Jala or wet lands, embracing all the rice lands of the village.

Kala, literally 'black,' meaning the high lands about the homestead which, enriched by manure and household refuse, are used to grow vegetables, cotton, jute, and other valuable crops.

Pál, or riverside lands which receive a deposit of silt (*pattu*) and are suitable for growing tobacco, cotton, mustard, and other *rabi* crops.

Again, according to their elevation, the arable lands are known as *khal*, or low lying, and *dhipa*, or high lands. Very low lands in hollows almost always full of water, so that they can only grow crops in the dry season or very coarse varieties of paddy, are called *gahira*, while in hilly country the lands at the valley bottom are known as *garara*. High lands that suffer from want of silt and water are commonly contemptuously referred to as *thenga*, *thangi*, or *dangar*.

* Report on the agriculture on the district of Cuttack, 1893.

Again, according to their composition, soils* are classed as follows:—

- (1) *Matal* is the name given to all kinds of stiff clayey soils. Rice and sugarcane are the principal crops grown on them, but besides these wheat, *birhi*, and *kulthi* are also cultivated.
- (2) *Chikita* is a strong sticky clay, which is almost too stiff to be used for successful cultivation, and grows for the most part coarse varieties of the *sarad* or winter rice. The outturn on such lands is said to be generally very poor.
- (3) *Chauria* is also a hard clay, which is very liable to cake on being exposed to the sun when ploughed. It generally cracks into hard blocks on getting dry, and is altogether an inferior soil.
- (4) *Dorasha* is a mixture of sand and clay in nearly equal parts. It is used for *biati* or autumn rice and for all *rabi* crops. It is easily worked and is retentive of moisture.
- (5) *Telbalia* is the name given to a loam which contains a larger admixture of sand than the *dorasha* lands. It is looser in texture, and being poorer requires more manuring than a *dorasha* soil.
- (6) *Baliatal* is a loam with a large admixture of earth; in other words, a rich sandy loam.
- (7) *Rangamati* is a red ferruginous sandy loam occurring near laterite rocks. Like *telbalia* it requires a great deal of manuring before it can produce a good crop.
- (8) *Thengajami* is an elevated sandy loam, with very little moisture, which as a rule is allowed to lie waste, though sometimes ploughed up for growing *biati*, paddy, *mandia*, and *kulthi*. The crops on such lands are necessarily very poor.
- (9) *Balia* is the name given to very loose sandy soils which grow poor specimens of *rabi* crops.
- (10) *Pattu* is an alluvial soil, formed from silt deposited by floods. It is used for tobacco, mustard, jute, coriander and cotton, and is taken advantage of to grow all kinds of miscellaneous crops.
- (11) *Pankua* is a black mud unmixed with sand, such as is found at the bottom of ponds and tanks.
Raktimatal is a stiff rich soil.
Pansia is a loose though comparatively fertile soil.
Gangutia, as the name would signify, is applied to a clay containing an admixture of *genguti* or lime, to be met with near those river beds which abound with nodulous limestone. An admixture of clay and limestone dust is in some places known as *khali* soil.
- (15) *Nunajami* is land which is more or less of a saline nature. It is generally of very little use. A few varieties of *laqhu sarad* rice are grown on it, when it does not contain an excess of salt.

According to their fertility, soils are divided into four classes: first (*aul*, second (*dajam*), third (*sayam*), and fourth (*chaharam*); but to hear the ordinary raiyat talk, one would not believe that there was any first class land in the Province, and might be inclined to put down all fields under one of three heads—'Water holes' (*panti-gahira*), 'uplands where the foxes have their earths' (*kenkshiali pasiya*), 'river sand,' the ordinary terms used by the cultivator in describing the fields of his holding.

121. Rice lands are generally manured with cowdung-ashes and household refuse, more rarely with rotten cakes of unburnt cowdung. The cowdung is carefully gathered by the women and children, but, except in a few favoured localities, has to be used for fuel, and can only find its way to the soil in the form of ashes. It is spread on at the time of the first ploughing at the rate of about half a ton (dung and refuse) to the acre, except on flooded lands which are enriched

* Taken from Mr. Banerjee's report.

by silt. Sugarcane, *pán*, and vegetables are more heavily manured, and oil-cake (*niria*) is often used in their cultivation.

Ordinary manure (*khata*) costs about two to four annas per cartload of 10 maunds, but it is rarely sold, except near the towns, each cultivator using the produce of his own home.

122. Water is wanted chiefly at three times of the year; in May-June for ploughing; in July and August for the *bhiushan* or ploughing up of the young rice plants, and in

Irrigation.

October for the final ripening of the crop. In areas irrigated by canals, water is taken from April to December, but in most parts of the district irrigation from streams and tanks is only resorted to for paddy in October-November, and is generally confined to the more valuable crops such as sugarcane, tobacco, and cotton.

Irrigation from wells I have not come across, and the tanks which at one time abounded in certain Parganas have to a great extent silted up; but water is taken from the *nallas* or *jores* in the low-lying tracts near the coast by means of the *tenda* or bamboo water-lift. Where the water has only to be raised a few feet it may be scooped up in a *sena*, a sort of basket made of split bamboo which two men use. Holding by the ropes attached to either side, they swing it backwards and bringing it down sharply into the water, carry the forward motion of the swing through until the *sena*, now full of water, is raised to the level of the water channel, when the contents are poured out.

Another way of lifting water a short distance is with a *janta* (the *karin* of Bihar) made of a single piece of wood about six feet long, hollowed out and shaped like one-half of a canoe; the broad open end resting on the head of the water channel while the pointed closed end dips into the water. When this is raised the water pours naturally into the channel. It may be worked by one man either directly or with the help of a bamboo crane and counterpoise as in the *tenda*, but cannot lift more than a couple of feet. It is not uncommon for two of these methods to be combined, the water being lifted by the *tenda* into a reservoir, and from that into the water-channel by a *sena* or *janta*.

I have seen tobacco being watered from earthen pots (*mathia*) carried a considerable distance by coolies, but this can only be done for very valuable crops, and where I saw it tried, it would have been much simpler to have made a channel from the river. Mr. Banerjee estimates the cost per acre of irrigating a field once with hired labour at from Re. 1 with the *janta* to Rs. 3 with earthen pots.

Along the foot of the hills fields are often irrigated from the small streams, and, the lift being small, the expense is less.

123. A full description of the principal agricultural implements is to be found in Mr. N. N. Banerjee's report and in Mr. Arnott's notes.

AGRICULTURAL IMPLEMENTS.

The plough.

The plough (*nangal*) is made and kept in repair by the village carpenter for a yearly payment of a couple of *gaunis* of paddy, worth say two annas. The wood is sometimes supplied by the zamindar but more often has to be bought, and costs about eight annas. The share is made by the village blacksmith for another couple of *gaunis* of paddy. The plough is light enough to be carried on the shoulder of a man, and with it a pair of bullocks can plough a third of an acre in a day. It is said to be a very indifferent instrument for turning over the soil, but its lightness and cheapness recommend it to the Uriya cultivator.

The Harrow.

The *mahi*, or harrow, consists of two straight pieces of *sal* wood or bamboo joined together by rungs like a ladder. To this the cultivator harnesses his bullocks and standing on the middle of it is dragged across the ploughed field breaking up the clods under it, and giving the land a level surface. It is used both in preparing the soil to receive seeds or seedlings, and afterwards to give young plants a firm foothold.

The Rake.

The *bida*, or rake, consists of a *sal* wood beam about 5 or 6 feet in length with twelve to sixteen iron tires or prongs about 14 inches in length. To this bullocks are harnessed

by means of a pole and they drag it across the fields to loosen the soil and uproot the weeds. Generally it has to be dragged twice across, first in one direction and the second time at right angles to the first in order to completely get rid of the weeds. It is only used on fairly dry land.

For digging, a *kodali* or *kuri* is used, as in other parts of India. They

The Mattock.

are of varying sizes and weights according to the purpose for which they are intended.

For reaping, a small toothed sickle or *dao* is generally used. Another

The Sickle.

form of *dao* with a straight and heavier blade is used for cutting jungle wood and fodder.

Grass for cattle or horses is scraped off the slopes of river banks or waste lands with a sort of small trowel called a

The grass Scraper.

khurpi.

Grain is generally husked with a *dhenki*, which consists of a beam of wood

The Grain Husker.

about 3 or 4 feet long hung at about a quarter of its length on a pivot between two uprights. At

the head of the long end is a thick wooden peg that comes down like a hammer into a stone mortar. To work the machine the mortar is half filled with paddy: the woman (it is generally a woman) then places her foot on the short end of the beam and throwing her weight on it depresses it. The foot being removed, the peg at the other end falls like a hammer on the grain, and so *ad capo*. Less commonly a pestle and mortar is used for husking.

Flour is little used by the Uriya, but for crushing pulses a *janta* or *chaki* consisting of two circular millstones working one on top of the other is used, as in other parts of India.

Flour Mill

The Uriya cart is peculiar. It consists essentially of two poles of *sail*

Carts.

wood or bamboo about 12 feet long tied together at one end and about 3 feet apart at the other, and

joined by cross bars at intervals. This framework rests on a pair of wheels about 4 feet high and 4 feet apart, and there is as much behind as in front of the axlebar. The bullocks are yoked one on each side of the narrow end, and will drag half a ton 15 or 20 miles a day on a metalled road.

From the Garhjats come heavy buffalo carts, shorter and broader, with low wheels of solid wood, and with the advent of the railway the light little Madras hackeries drawn by a single bullock have become common in Cuttack town.

For carrying grain a long coffin-shaped basket of split bamboo called an "*odaro*" is fitted on to the cart and will take some 10 maunds or more.

124. I propose to say as little as possible on this subject for fear that

System of measurement of land.

zamindars may again revert to the very inaccurate methods formerly in use. At the last Settlement the internal village measurements were made by

Uriya amins with measuring rods of local length; these measurements were converted to standard measurement, and in the case of many estates were again reconverted to local measurements. It may be added that the external circuit of the villages as well as the area were surveyed and computed by professional surveyors. As a rule, the Uriya amins measured cultivated lands with fair correctness, but the most confusing mistakes were made in the measurement of large areas of waste lands. In order to fit the areas of waste lands as well as of the cultivated lands within the area ascertained by the professional circuits, the records of the last Settlement contain many ingenious devices, while in not a few cases the attempt was abandoned as hopeless. I may add that sometimes the length of the rod is not stated, so that such local measure as will fit the area of the professional circuit should presumably be used. We have also frequently found that the rod has changed in length since the last Settlement.

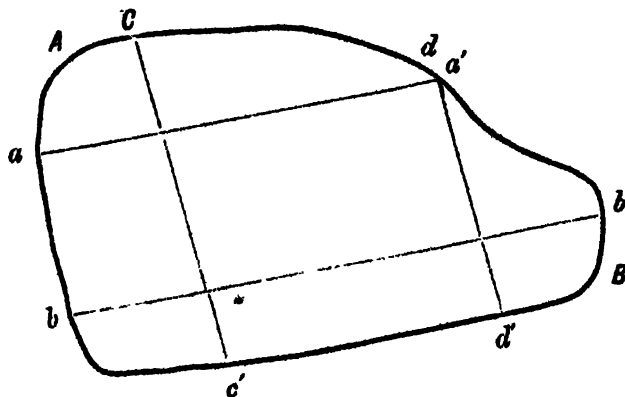
In the old Settlement records, the proceedings regarding area refer to the professional survey as "the surveyor's *sahib's* account," and the other is referred to as "the account of the Uriya *jarib*."

The Uriya measures with a *padika* or rod, and I have more than once inspected a village containing portions of two estates, each using rods of different lengths. These rods are supposed to be kept in the custody of the village *chaukidar*, and in theory should not be used by the *gomastha* or *sarbarakar* except in the presence of the *chaukidar*. In fact the latter is the "official

measurer." We find, however, in villages where the *sarbarakar* and *raiya*t do not get on well, that the latter keep a rod of their own, generally several inches longer than that of the *sarbarakar*.

The following note by Mr. R. Nathan on the Uriya system of measurement and area calculation used at the time of the last Settlement is inserted by way of illustration.

Take any field A B



Calculate roughly average length and average breadth by measuring lines aa' and bb' (length) and cc' da' (breadth) with the *padika*.

Let $aa' = 12$ *padikas*, $bb' = 15$ *padikas*, $cc' = 13$ *padikas*, $dd' = 8$ *padikas*.

Then average length $= \frac{12+15}{2} = 13\frac{1}{2}$ *padikas* = 3 *kahans* 6 *pans*.

Average breadth $= \frac{13+8}{2} = 10\frac{1}{2}$ *padikas* = 2 *kahans* 10 *pans*.

N.B. 4 *padikas* = 1 *kahan*; 1 *padika* = 4 *pans*.

To calculate the area multiply the average length by the average breadth omitting the term formed by the product of "pan" into "pan" and remembering that the area of a square of which the side is 1 *kahan* is 1 *gunt* and that the area of a parallelogram of which the length is 1 *kahan* and the breadth 1 *pan* is 1 *biswa*.

Thus, area, $= (3 \text{ kahans} + 6 \text{ pans}) (2 \text{ kahans} + 10 \text{ pans})$
 $= 6 \text{ gunts} + 12 \text{ biswas} + 30 \text{ biswas}$
 $= 8 \text{ gunts } 10 \text{ biswas}.$

The term formed by the product of 6 *pans* and 10 *pans* is omitted.

The error caused by the omission is 60 square *pans* or $\frac{60}{15} = 4$ *biswas*; i.e., about 3 per cent.

One result of the system is, therefore, that the area recorded in the old Settlement papers is, generally less than the true product of the recorded length and breadth of the plot, and therefore, other considerations apart, the recorded area is in general less than the actual area.

The maximum error that can occur is 15×15 *pans*, or rather less than one *gunt*.

To take an actual case—

MAUZA BHAI BANDA—*Bhowria* No. 589.

As recorded—average length (calculated from three traverse lines) = 3 *kahans*, 3 *pans*.

average breadth = 7 *kahans*, 8 *pans*.

recorded area = 23 *gunts*, 13 *biswas*.

Area according to rule = $(3 \text{ kahans} + 3 \text{ pans}) (7 \text{ kahans} + 8 \text{ pans})$

= 21 *gunts* + 24 *biswas*, + 21 *biswas*.

= 23 *gunts* 13 *biswas*.

and the error = 24 square *pans* = $1\frac{1}{2}$ *biswas* or 4 per cent.

The general explanation of the local land measure is as follows: Every *padika* is so many *dastis* in length, a *dasti* is supposed to be $4\frac{1}{2}$ inches or the width of a man's fist across the knuckles.

To account for inaccuracies of measurement, e.g., the slipping forward or backward of the rod, and to give the *raiya*t every allowance for *kira* and *ahri* (the embankments within and the ridges on the border of his field) a *kani** is

* Not to be confused with the *kani*, meaning 5 *gandas* or one-fourth of a *biswa*.

added to the number of *dastis* of which every *padika* is composed. A *kani* varies according to the number of *dastis* in the *padika*; in theory, at least, it is larger where the number of *dastis* is larger, but zamindars give *kani*s of different sizes, and some give no *kani* at all. It is for this reason that an 18 *dasti padika* in one local area may be of quite a different length from a *padika* of that name in another.

I need only give one instance of the *padika* to illustrate its use as a land measure. The so-called standard *padika* is 10 feet 5 inches and 1 *job* in length where a *job* is that fraction of an inch which will make a square *padika* equivalent to a *biswa* of size sufficient to be equal to $\frac{1}{16}$ of a *man* or acre. The standard *man* therefore consists of 25 *gunts* and a *gunt* of 16 *biswas*, and a *biswa* is one square *padika* of 10 feet, 5 inches and 1 *job*. The standard *padika* is called the "24-*dasti padika*."

	Ft.	Ins.	Job.
24 <i>dastis</i> of 4½ inches each	9	0	0
Add a <i>kani</i> ...	1	5	1
Total	10	5	1

I do not attempt to describe the lengths of the different *padikas* because, as I have shown, the name is no certain indication of the length of any *padika*. It is only necessary to add that the *padika* varies so as to produce a *man* varying from 2.48 of an acre to 1.39 acres.

We have endeavoured to avoid any use of the local measure in the final records. This principle was very successfully followed in the Khurda Settlement of 1881, and at the present day raiyats now talk of their "*acres*" and their "*decimals*." At attestation, of course, every raiyat had his area explained to him in local measure as well as in acres and decimals, and was satisfied as to the area in his possession. It is hoped, therefore, that in a short time a uniform system of measurement may be in force throughout the Province.

125. The standard of weight for ordinary articles of merchandise is the seer which in Balasore is the standard *seer* of 80 *tolas* (a *tola* is the weight of one standard rupee = 180 grains, Troy) equal to 2.0532 lbs. avoirdupois.

WEIGHTS AND MEASURES.

The Seer *.

In Cuttack and Puri the *seer* in common use is one of 105 *tolas* known as the "*Katki seer*" and weighing 2.7104 lbs. avoirdupois.

The parts and multiples of the *seer* are—

4 <i>chutaks</i>	=	1 <i>pao</i> .
4 <i>pao</i> s	=	1 <i>seer</i> .
16 <i>seers</i>	=	1 <i>maund</i> .

Salt is always sold by the Balasore *seer* of 80 *tolas*.

Metals, vegetables, molasses, fish, and a few other articles are sold by the '*pal*' and *bisa*.

The Bisa.

A '*bisa*' weighs 120 *tolas*, or one-and-a-half standard *seers*, and is divided into 20 to 30 '*pals*.' The explanation of the use of this measure is that the articles in question are commonly weighed on a steel yard (*bisa kâli*) the interval between the point where it balances when the scale pan is empty and that where it balances with 120 rupees in the pan being divided into 20 or more divisions, each called a '*pal*.'

On the standard yard used for metals and molasses there are twenty such divisions and a *pal* is 6 *tolas*. For fish and vegetables the common division is into 25 *pals*, but 22, 24, and 30 *pals* are also found.

The divisions and multiples of the *bisa* are—

4 <i>dhana</i>	=	1 <i>rati</i> .
4 <i>ratis</i>	=	1 <i>china</i> .
10 <i>chinas</i>	=	1 <i>marha</i> .
4 <i>narhas</i>	=	1 <i>karni</i> .
4 <i>karnis</i>	=	1 <i>pal</i> .
20 <i>pals</i>	=	1 <i>bisa</i> .
80 <i>bisas</i>	=	1 <i>chhula</i> .

* In Vol. LXI, Part I of the Journal, of the Asiatic Society, page 43, there is a very interesting paper on "Troy weights and general currency of Orissa" by Babu M. M. Chakravarti.

Troy weight.
divided as follows:—

For the precious metals and jewels the standard is the *bhari* or *tola* of 180 grains, troy, which is

1 *bhari* = 10 *maskas* or 2 *marha*.
1 *marha* = 8 *ratis* or 2 *chinas*.
1 *rati* = 4 *dhan*.

For the sale of rice, paddy, and other grain the standard of measurement is the *gauni*, also called in Balasore the *puri*.* This is a basket with a capacity varying locally from $1\frac{1}{2}$ to 6 *seers* of rice and called accordingly "*tin sir gauni*," "*char sir gauni*," etc.

In a few markets the capacity is expressed in *seers* of *birhi*, so that the $3\frac{1}{2}$ *seers gawni* of north-eastern Cuttack contains only $2\frac{1}{4}$ *seers* of paddy; but rice is the common standard, and the ordinary 5 *seer gauni* holds about $3\frac{1}{2}$ *seers* (Cuttack weight) of dry paddy. The measure for large sales of paddy, etc., is the *bharan* of from 80 to 200 *gaunis*, while petty retail vendors use a small measure called a *katha* or *kanchā* which is generally a reputed *seer*, but in parts is one-tenth of a *gauni*.

The common multiples of the *gauni* are—

(1) 20 *gaunis* = 1 *pauti*.
2 *pautis* = 1 *chhela*.
4 *chhelas* = 1 *bharan*.

Found in Balasore where the *gauni* is 2 *seers* and the *bharan* 8 maunds.

(2) 10 *gaunis (puri)* = 1 *pauti*.
4 *pautis* ... = 1 *chhela*.
4 *chhelas* ... = 1 *bharan*.

Found in Balasore with a *gauni* of $2\frac{5}{8}$ *seers* and *bharan* of $10\frac{1}{2}$ standard maunds.

(3) 10 *gaunis* = 1 *pauti*.
4 *pautis* = 1 *chhela*.
5 *chhelas* = 1 *bharan*.

Found in the Jajpur sub-division of Cuttack with a *gauni* of $2\frac{1}{2}$ standard *seers* and a *bharan* of $12\frac{1}{2}$ maunds.

(4) 10 *gaunis* = 1 *pauti*.
5 *pautis* = 1 *chhela*.
4 *chhelas* = 1 *bharan*.

In northern and eastern Cuttack the *bharan* varies from 12 to 16 maunds.

(5) 20 *gaunis* = 1 *chhela* (or *pauti*).
4 *pautis* = 1 *bharan*.

This is the general measure in Cuttack, Khurda and Puri, and the *bharan* varies from 6 to 10 maunds, and is generally 8 Cuttack maunds or $10\frac{1}{2}$ Balasore maunds.

To sum up, a *bharan* is in Balasore 160 *gaunis* and varies from 8 to 16 standard maunds; in Cuttack and Puri it is generally 80 *gaunis*, in a few places 100 *gaunis*, and in north Cuttack 200 *gaunis* and varies within much the same limits.

The ordinary measure of distance is the *kos*—2,000 *dhanu* or 4,000 yards, though the villager commonly uses such indefinite terms as a "stone's throw" or "shouting distance."

126. Appendix F shows, District by District and Thana by Thana, the areas under the principal crops grown in the Province. Rice occupies (including Khurda sub-

division) about 21,82,000 acres, or nearly 88 per cent. of the cropped area. The next crop in importance is *mandia*, a millet grown on some 42,000 acres, or on rather less than 2 per cent. of the cropped area. *China* is a millet of but little importance, though the area sown with it is probably more than the 500 acres shown in the crop statements.

Other food-grains in column 10 are generally *rabi* crops grown on twice-cropped land. They occupy over 9 per cent. of the cultivated area, and

* Also called "*nauti*" in Puri, but elsewhere a *nauti* = 3 *gaunis*.

include *kultha* (*dolichos biflorus*), *birhi* (*phaseolus radiatus*), *muga* (*phaseolus mungo*), *harar* (*cajanus indicus*), *chana* (*lathyrus sativus*), *barguri* (*vigna catjang*), and *makka* (*zea mays*). Of these the first four are the most important, and I should estimate that a third of the total area shown represents *kultha*, and not less than a sixth, *harar*.

Linseed, *til* (*sesamum*), and castor are grown on small areas, generally in riverside lands. Others, in column 13, represents chiefly mustard, grown after rice on valuable lands.

Condiments and spices include coriander seed or *dhania*, ginger or *ada*, turmeric or *haldi*, and some garden crops such as onions, chillies, and arrowroot. The total area is only 850 acres, as most of these crops are grown in the homestead lands shown in column 27.

Sugarcane is grown in rotation with paddy on well irrigated lands. Only 1,700 acres are shown under this head in the statement, but I am sure that in ordinary years the area planted with this crop is not less than 5,000 acres. As it is grown on rice land, and an extra rent is often payable for its cultivation, it would be natural that amins should have been persuaded to understate the area.

Cotton and jute are valuable crops, but the former is grown on less than 1 acre in a thousand, and the latter on less than 1 acre in two thousand. Other fibres include *dhaincha* and *sunh*, which are grown to a very small extent.

Many dyes are used by the Uriyas, and are prepared from earth and leaves, etc.

Kusuma or safflower is grown in homesteads chiefly in the Puri District. Indigo is grown in a few villages of Cuttack District and in small patches in Puri.

Pan is the betel vine grown for its leaves, in which the *supari* nut is wrapped before chewing. It is grown on only 500 acres but is an extremely valuable crop.

Tobacco is grown all over Cuttack on the silt-covered lands on the banks of rivers; the total area shown under this crop, 3,400 acres, represents about the area planted in an ordinary year. In favourable years there is much larger area under it.

Inkar is a reed grown to make supports, etc., for the betel vine. The area is certainly under-estimated, as 500 acres of *pan* gardens must represent at least as much *inkar*.

Homestead lands represent what is shown in the *khassas* as *bari* without mention of crop. It includes courtyards and threshing floors, waste lands at the back of the house, and gardens within the compound wall. It is not possible to estimate the amount of land bearing crops, but the greater part of it grows cucumbers or spices, and miscellaneous herbs or fruits or pulses for home consumption.

Maize is often grown, and so are plantains, *bacl*, etc., while in the out-lying plots *chana* and *kultha* are often to be found. I estimate that of 1,14,000 acres shown under this head at least half must actually grow some sort of crop.

Garden produce and fruit-bearing orchards, represents mango groves, plantations of plantains, *pulung*, jack fruit, toddy palm, and other trees, and gardens where such are distinguished from homestead. Probably of the 51,000 acres about 40,000 represent groves of mango and other trees, which at 25 trees to the acre would give a total of a million trees in the Province besides the isolated trees on raiyati holdings, or on homestead lands or along the roads.

Under yams are included the true yam or *khamba alu* and the commoner *khandamul* or sweet potato. About 3,500 acres are shown under this head, but this is exclusive of the areas included under homesteads in column 27 (Appendix F).

Baigun or *Brinjal* (*solanum melongena*) is the most popular and widespread of Orissa vegetables. The area shown under this head in the *khassas* is only 2,800 acres, but there must be quite another 10,000 acres included under columns 27 and 29.

Others in column 30 includes chiefly various kinds of melons, pumpkins, and cucumbers grown on the sand-covered banks of rivers, and a small area under onions and *saru* (*colocaria antiquorum*). Much of the area under these crops is, however, included in homestead land.

127. Maps Nos. VI to VIII show the differences in the proportion of land in each local area growing *sarad* and *biali* rice, and it will be observed that there is a very great variation in the figures for the different districts—

DISTRICT.	PERCENTAGE ON NETT CROPPED AREA OF—				
	Early rice.	Winter rice.	Spring rice.	Twice-cropped land.	Homestead land.
Cuttack ...	13	70		14	5
Balasore ...	1	91		1	5
Puri (Sadar Subdivision) ...	6	78		10	3
Khurda ...		85		3	2
Orissa ...		80		8	5

It will be seen that Cuttack and Puri Sadar subdivision contain far more twice-cropped and *biali* land than Balasore. Khurda grows practically no *biali* or *dalua*, there being but a small area of *jheels* suitable for the latter, while the people seem to have an aversion to sowing early rice and prefer the more risky but more prolific *chhota laghu*. It is likely that the twice cropped area in Balasore is under-estimated owing to collusion between amins and proprietors, but it is a fact that there is far less *biali* or *rabi* grown than in the other districts, partly owing to the difference in the soil, and partly to the greater laziness of the inhabitants.

I now proceed to give some account of the cultivation of the principal crops mentioned in the preceding paragraphs.

128. The staple crop of Orissa is rice (*oryza sativa*) called in Uriya *dhan*.

Rice. It is grown on 87 per cent. of the total cultivated area, viz., on 85 per cent. in Cuttack, on 92 per cent. in Balasore, and on 88 per cent. in Puri, and the distribution within each of these districts may be seen from maps Nos. VI to VIII. In very few villages is less than half of the arable land under rice, and it is common to find more than nine-tenths growing this cereal in some form.

The varieties of paddy are very numerous, but they all fall under one of three heads according to the season at which they are sown and reaped.

Biali or autumn rice is the earliest crop, and is reaped in August and September.

Sarad or winter rice is sown in June-July and harvested between October and January.

Dalua or spring rice is sown after the floods have subsided, and harvested in March-April.

The winter rice is subdivided according to the amount of water it requires into *guru* or heavy and *laghu* or light varieties and the latter again into small, medium and large.* The following table will show the principle heads of the classification:—

Dhan ...	{ <i>Biali</i>	{ <i>Satika</i>	{ <i>Chhota laghu.</i> <i>Majhla laghu.</i> <i>Bara laghu.</i>	A large number of varieties known by various names as <i>champa</i> , <i>kantakuli</i> , <i>nudia</i> , etc., etc., see Appendix H. to Mr. Kingsford's report on Balasore.
		{ <i>Bara.</i>		
	{ <i>Sarad†</i>	{ <i>Laghu.</i>		
		{ <i>Guru.</i>		
	{ <i>Dalua.</i>			

129. The earliest of all the rices is the *satika* variety of the *biali* said to ripen within sixty days of its sowing, while the heavier qualities take a month longer.

These kinds of paddy are always grown on the higher lands of the village and for preference in a light loamy soil, the best yield being from crops raised on the *kala* lands and in favourable years on the *pāl* lands also.

The land is ploughed several times as early as possible after February, and then is harrowed and left to mellow in the sun, and with the first rain in June

* *Chhota laghu*, *Majhla laghu*, and *Bara laghu*.

† In Balasore the best known divisions of *sarad* are *asu*, *nabakanda* and *guru*.

the seed is sown broadcast at the rate of about 30 seers to a maund per acre, manure having been previously spread over the field. Three days later the seed is ploughed in and the land harrowed; a second harrowing is given a fortnight later and the plants are thinned out.

After this the crop requires weeding two or three times, and in August or September is ready to be cut. The reaping is done by men and women with a sickle, and only a few inches of stubble are left on the ground.

Biali rice if on high land may be followed by pulses, generally *kulthi* or *birhi*, and on alluvial or homestead lands by mustard, linseed, or *harar*. In rich and irrigated soil or in very favourable seasons *laghu* paddy is also transplanted into the fields from which the *biali* has been cut. The total area shown in the crop statements under *biali* is 166,900 acres, viz, Cuttack, 128,000; Balasore, 9,200; Puri 29,700.

It is more precarious than the *sarad* crop, being injuriously affected by drought in June and July, but on the other hand, where the *sarad* is spoiled by want of rain in September and October, there may be a bumper crop of *biali*.

It is curious how much more popular this crop is with the cultivators of Cuttack and Puri sadder than in Khurda or Balasore, more than three-fourths of the total *biali* area lying in Cuttack.

130. While the autumn rice is always sown broadcast, the winter varieties may be either transplanted or sown at once where they are to grow. As the latter is by far the more popular method I shall describe it first.

The lightest of the *laghu* varieties differ but little from *biali*, while the *bara laghu* pass with no very marked line of division into *guru*, but as a rule the *laghu* paddy is grown in moderately low lands, which are wet, or under six inches to a foot of water, pretty continuously from June to October, and likes a fairly stiff soil (*matal*). The crop having been harvested in December the land will either grow a crop of *mung* or millet, or lie fallow until April or May, when it is ploughed as often as the weather and the resources of the cultivator permit, and manure consisting of little heaps of cowdung and refuse is spread over the surface. The number of ploughings depends on the quality of the soil and its elevation, high lands requiring more ploughing than low. Something depends also on the quality of the rice to be grown, the finer varieties needing more careful preparation of the soil. The seed, about 30 to 40 seers to the acre, is sown in the end of May or beginning of June if the weather is favourable, and germinates within fifteen days. Ordinarily it is sown dry, but if the sowing is delayed or there is a superabundance of water, it is first steeped so as to induce partial germination and to prevent it from floating. About a month after sowing, if there is sufficient water in the field, the plough is passed over it so as to thin out the seedlings, now six inches to a foot high. Those that are uprooted and left floating in the water are replaced by hand and grow again readily. This operation, known as '*biushan*,' is considered to be of great importance, and it is thought most unfortunate if for want of water it has to be delayed until August.

As soon as the young plants have re-established themselves after this violent disturbance, the harrow is passed over them so as to press them into the mud. This is called the *kala mahi*. A week or ten days later weeding begins, and at the same time any irregularity in the interspacing of the plants is corrected.

Sometimes only one weeding suffices, but good cultivators prefer to have a second weeding a fortnight latter. The plants flower in October or November and the wild paddy (*balunga*) left over from the dropped grains of previous harvests is picked out.

For the first year or two this self-sown paddy is reaped with the rest, but it soon deteriorates and becomes known as '*rashi*,' the grain of which is liable to drop from the ear before harvesting, and the degeneration continues until the plant resembles wild paddy. It has therefore to be separated every two years, and this is often possible by sowing red after white varieties, as they are readily distinguished by the colour of the lower part of the stem and of the girule (*kanta*). Sometimes, too, transplanting is resorted to to finally eradicate the *balunga*.

When the ears are full and ripened and before the grain begins to get dry and drop the harvesting begins. Sometimes the standing paddy is first laid low with a bamboo to prevent the grain being scattered by the wind; then the reapers come and with the *dao* or sickle cut off the stalks close to the ground. The cut paddy lies for a few days and then is gathered into larger sheaves which are carried to the homestead by cart or *banghi* and there stacked.

The cultivation of the *Guru* varieties is almost the same, but as they are grown in the heavy clay lands that retain two to four feet of water, less careful ploughing is necessary and manure is more sparingly given, if at all. In very low lands (*jalapat*) no refinements of cultivation are possible, and the seed once sown is, if the land is still dry, ploughed over and harrowed, and if the rains have begun, only pressed in with the harrow and then left, the depth of water being regulated so far as possible by means of the ails of the field. The harvesting is done a month later than that of the *laghu* varieties, i.e., in January, and as a rule only the ears are cut, the straw being too sodden to be of value.

131. Transplantation is an unpopular system of cultivation, as it involves more labour and the transplanted seedlings are very delicate for the first month and liable to injury by

Transplantation.

flood and still more by drought; and a very careful enquiry made by Mr. Arnott, Executive Engineer of the Mahanadi Division, showed only 4 per cent. of the cultivated area to grow transplanted rice. It is, however, admitted that, when successful, transplantation gives a larger yield, and it is resorted to for fields (especially when irrigated) that grow a *sarad* after the *biuli* crop, to get rid of the wild paddy, to avoid the risk of loss by early floods, and to replace the loss of the broadcasted crop, if such occurs before the end of July.

The nursery is generally a field near the village well manured and fenced in to keep off jackals and other animals. The seeds may be sown either dry or wet. If the former method be adopted, the field is ploughed while dry as often as possible—not less than five or six times—and the soil carefully pulverised and weeded. Before sowing a little sand is sprinkled on it and the seed scattered and ploughed in. It is then carefully watered until the plants come up.

In the wet method the land must be flooded and then ploughed up until it is of the consistency of a thick gruel. The seeds are soaked for twelve hours in an earthen jar or *handi* and then partially dried in a basket covered with straw, and in this condition are sown broadcast on the sticky surface of the field. In four or five days the plants show themselves and water is then gradually admitted.

When a month old the seedlings are ready to be transplanted into the rice field which has been prepared by ploughing and manuring as for broadcasted paddy, and is once again ploughed and harrowed before the young plants are ready. The seedlings, 6 inches to 18 inches high, are arranged in bunches of three to four and six to nine inches are left between each bunch. The roots are carefully imbedded to the depth of a couple of inches; they are then left and require no further attention beyond a good weeding and a copious supply of water.

The earlier the transplanting is done the better the results, and the middle of June to the middle of July is considered the proper time; but the operation often goes on for a month later.

132. *Dalua* is a coarse variety of paddy grown on lands too heavily inundated to yield *sarad*, and especially in the shallow water round the edges of *jhils* and water-

Dalua.

courses. The soil is generally clayey and often saline, for it is a peculiarity of this crop that it is but little affected by the superabundance of saltpetre.

A nursery is selected in a corner of a tank or a drain, and the depth of water is regulated by means of little walls of mud. It is ploughed once or twice and levelled; the seed having been previously steeped for twenty-four hours in an earthen vessel, is placed in a basket and covered with straw for two or three days until it begins to germinate: it is then sown very thickly in the seed bed. The land is prepared to receive it by ploughing in the water until the whole becomes one pulpy mass with an inch or two of water over it. In this the seedlings, when about a foot high, are imbedded, and require to be plentifully supplied with water until they flower. In March or April the crop ripens and is harvested.

Only 36,000 acres are shown in the *khasras* as growing *dalia*, but of recent years there has been a tendency to extend its cultivation in inundated areas with the aid of water supplied by the Irrigation Officers through canalised channels. There is but little *dalia* in Balasore or in Khurda subdivision, and it is only in the low lying lands of north eastern Cuttack and in the heavily-flooded Parganas of Purbaduai and Oldhar in Puri that it forms a staple crop. After the Brahmini floods of 1894 a large area was sown with *dalia* rice in the Bayang Pargana of Balasore, and it is likely to come into favour in the south of the District.

133. Two methods of threshing the paddy are followed, the former generally for *biahi* and *laghu* paddy, the latter for *sarad* and for *dalia*.

Threshing.

The rice is, in the former case, cut three to six inches from the ground and carried to the threshing floor (*khela*), where it is stacked. A plank is then fixed so as to form an inclined plane about three feet high at the upper end. The thresher stands at the head of this plank, and holding a bundle of paddy with the ears away from him strikes it on the plank until the grain falls out on the threshing floor, from which it is afterwards collected.

In the other method, the paddy which has been cut with only a few inches of stalk is spread on the threshing floor and trodden by bullocks yoked to the pole in the centre.

134. The winnowing is done by means of a flat basket (*kulu*) in which the grain is placed. The basket is lifted by the operator with both hands above his head and shaken

Winnowing.

from right to left and left to right with a slight vertical motion, so that as the man steps backwards the light and worthless refuse (*achara*) is left suspended in the air and blown away by the breeze. After this has been done for a few minutes the grain is well fanned to blow away the remaining dust and then placed on the top of the heap of paddy ready to be stored.

135. Paddy is generally stored in bamboo baskets (*doh*) plastered over with mud and dung. Often also in pits dug in the yard of the house. Mahajans use small store-

Storing.

houses of mud and wood raised two or three feet from the ground and capable of holding 500 to 1,000 maunds.

Clean rice.

136. Rice is prepared from paddy in two ways, viz. :—

(a) By drying the paddy in the sun, and then crushing it in the *dhenki*. This is known as *atap* rice ;

(b) By boiling the paddy, and then drying it in the sun and crushing it in the *dhenki*. This is what is generally eaten, being known as *sidha* rice.

The outer husk of the paddy which is thus removed is called *tunsa* and is used for fuel, whereas the fragments of husks and the outer shell covering the grains of rice go by the name of *kunda*, and form a favourite fodder with cattle. Three seers of paddy would yield about quarter seer of *tunsa* and the same quantity of *kunda*.

The work is usually done by women on contract, and 10 *gaunis* of clean dry rice are returned for every 25 *gaunis* of paddy, or sometimes of every 22. This, however, leaves a large margin of profit to the operator, even allowing for the difference in the specific gravity of rice and paddy; and in the returns of the Public Works Department the ratio rice to dry paddy is taken at two-thirds. This result has been verified by experiments made by Mr. Maude and Babu Jamini Mohan Das, but it is perhaps rather high, and for the purpose of the calculations in this report, I have taken the proportion of rice to paddy as 5 to 8, the accepted ratio of the Agricultural Department.

137. Mr. N. N. Banerjee takes the average outturn per acre as 15 to 20 maunds of paddy, which closely corresponds to the popular estimate. Roughly, the people classify

Outturn of rice.*

rice lands as first, second, and third class, according as they are capable of producing 3, 2, or 1 *bharan* of paddy. Now a *bharan* is generally about 8 Cuttack maunds, and the area of first class land is certainly no less than

* See also paragraph 102.

that of third class so we may take the popular average at 2 *bharans* or 16 maunds, equal to 10 maunds (Cuttack weight) of rice; which is approximately correct.

The results of the last ten years' experiments by officers of the Public Works Department give an average outturn of 19·72 maunds of paddy on irrigated and 15·59 maunds on unirrigated land. The results of crop experiments of 1895—98 by officers of the Settlement and district staffs gave an average for irrigated land of 1,996lbs. and for unirrigated of 2,003lbs. per acre.

Comparing these with the provisional estimate in 1891,* we get the following:—

		WEIGHT OF CLEAN RICE IN LBS. PER ACRE.	
		Irrigated.	Unirrigated.
		Mds.	Mds.
Irrigation Department, 1885—96	...	1,014	802
Estimate submitted to Government of India by Director of the Department of Land Records and Agriculture	... ..	1,045	902
Settlement and District experiments of 1895—98	...	1,247	1,252
Average	...	1,102	985

This is equivalent to about 13½ standard maunds per acre for irrigated and 12 maunds per acre for unirrigated lands.†

An examination of the returns does not discover satisfactory evidence of any superiority in the yield of transplanted rice over that of broadcast. The outturn of straw varies from 20 to 50 maunds, and may be taken on an average at 25 maunds.

Biali is generally estimated to yield two-thirds of the weight of grain obtained from winter rice, or say 8 maunds of cleaned rice to the acre and about 18 maunds of straw.

Daiua was found by the Inundation Committee to give the largest yield of all, but so much of the field is taken up by the mud walls for regulating the water that I take the outturn per acre as equal to that of *biali*.

The byo products obtained in the threshing and husking of paddy are the outer husks or *tunsa* used for fuel, and the bran or *kunda* which is a good cattle food.

138. *Mandia*, the *marua* of Bihar, is an upland cereal with a small reddish grain, like a mustard seed. It is grown on high, light, and inferior soils on which *biali* rice would hardly succeed.

Mandia ‡

Sometimes it is sown broadcast in May; more often it is first sown in seed beds and transplanted in June when the seedlings are six inches to a foot high. The transplanting requires to be rapidly done, as the plants cannot be left out of the ground long. The crop ripens in August-September and yields about 6 to 8 maunds of seed to the acre. This is ground into flour and eaten in cakes or with rice by the lower classes. It is said to have the merit of producing such a feeling of satiety that after one full meal a man does not feel inclined to eat again for twenty-four hours.

It requires good rain in June and July, and is liable to be damaged by caterpillars.

This is, perhaps, the commonest cereal after rice in Puri and in Cuttack, in which districts it is grown on some 58,000 acres, and is generally followed by a crop of *kultha*. In Balasore it is rare. Another variety, known as *takari mandia*, so called because it is supposed to derive sufficient moisture from the dew, is grown as a *rabi* crop on riverside lands, but is less common. It is a late crop, being sown in February and reaped in April, and if the rain is deficient, requires artificial irrigation.

139. *China* is a millet grown as a *rabi* crop on *biali* and *laghu* lands. It is a delicate plant requiring a good rich loam and abundant water. The field selected is generally

China (*Panicum miliaceum*).

* Department of Land Records and Agriculture to Government, No. 386A, dated 3rd March 1896.

† Standard maunds of 82½ lbs.

‡ *Pennisetum purpureum*.

near a watercourse, and, as soon as the previous crop has been harvested, is ploughed and harrowed three or four times. The *china* is mixed with sand and sown broadcast, and in eight or nine days the plants spring up. Should rain fail, it requires constant irrigation. In three months it is ready to cut, and in a good season may produce 8 maunds per acre; but the crop is very uncertain, and Mr. N. N. Banerjei puts the average at only 3 maunds. It is eaten like rice, and also cooked with milk, but is not common enough to be of great value as a food-grain. The *milan khasra* only shows some 500 acres, but this must be below the mark.

140. Wheat, locally known as *gahama*, is grown to a very small extent on upland fields after rice, and generally on loamy or silt-covered soil. It is sown broadcast in October-November, and reaped in April; and is as a rule left to grow up in the meantime as best it may.

Probably 500 acres, chiefly in the Jajpur Subdivision of Cuttack, are sown with this cereal, but only some 300 acres are recorded in the *khasra*.

141. Barley, or *jaba*, is grown on light sandy lands, especially in areas exposed to inundation. It is sown broadcast about the 1st of November and is reaped in March. The grain is boiled and eaten whole or made into flour, and is said to be very 'cooling.'

Over 500 acres are shown in the *milan khasra* as under barley, and the figure may be taken as approximately correct.

152. *Kultha* is at once the commonest and the least valued of the pulses. It is grown on poor lands after *mandia* or autumn rice, or on yet higher and more sandy lands which produce no other crop.

The land requires to be ploughed three to six times and harrowed. The seed is then sown broadcast and the *mauli* again passed over it. In February or March the plants are plucked by hand and carried to the threshing floor, where the grain is trodden out by cattle.

Mr. Nathan put the average outturn at 25 to 40 *gownis*, or 2½ to 4 maunds, and Mr. N. N. Banerjei at 3½ maunds per acre; but the actual cuttings made (25) give an average of over 10 maunds. We may safely put it at 8 maunds on an average, which is not far off Mr. Arnott's estimate of 100 *gaunis*. It sells at 20 to 30 Cuttack seers per rupee. It is an excellent food for cattle and horses, and in times of scarcity it is boiled and eaten, with or without rice, by the poorer classes, and in 1896-97 it formed the only food of the people in some villages. Its distribution is very general throughout the Province, and I estimate that it is grown on about 80,000 acres.

143. *Birhi* is a more valuable crop than *kultha* and is grown by preference after *biati* rice where the land is rich enough. The difference is very marked, for while *biati-birhi* lands are rented at about Rs. 3-2 to Rs. 4-12 per acre, *biati-kultha* lands rarely pay more than Rs. 2-8 and *mandia-kultha* not more than Rs. 1-9 per acre.

The cultivation is much the same as for *kultha* which in external habit it resembles, but it grows more luxuriantly and is less affected by weeds, drought, etc.; it requires a good light loamy soil and a fair amount of rain up to the time of flowering in November; after that it wants fine weather. It is plucked in January, and the grain is trodden out by cattle.

The yield is about 8 maunds of small round seed in a good year. This is the average of the experiments made. Mr. Arnott's estimate is 6 maunds; Mr. N. N. Banerjei's, 3 maunds. It is given to cattle and eaten as a pulse (*dal*) and sells at 18 to 24 seers to the rupee. It is found chiefly in the inundated tracts in Cuttack and Puri, and is liable to be eaten up by insects if the weather in November be wet and cloudly. Probably there are some 40,000 acres under this crop.

144. *Muga* or *mung* is the commonest *rabi* crop grown on *sarad* lands. There are three main varieties, the *dhara* or *sauri muga* having a light yellow grain, *kara muga* with a dark grain, and *jhai muga* with a whitish grain. The first two are the more valuable, and are sown on light *laghu* or good *biati* land and sometimes mixed with *birhi*. *Jhai muga* is grown on clayey soils after *sarad* rice.

After the preceding crop has been reaped the land is ploughed two or three times and the seeds sown broadcast. It is ready by February or April, according to the time of sowing, and is either plucked or cut with a sickle and taken to the threshing floor. It is trodden out by cattle, and yields 5 to 8 maunds. This is the pulse most largely consumed by the better classes in Orissa; it is not so general in its distribution as *birhi* and *kultha*, being found chiefly in the inundated area and is commonest in south Cuttack and Puri. It may be grown on 20,000 to 30,000 acres in favourable years.

145. *Harar* is a pulse of which two varieties are found in Orissa, the *chaita harar*, also called *pala*, which is sown in Assin and harvested in Chaitra, and the *deo* or *nali harar* sown in Jaistha and harvested in Magh or Pous. The first variety is the more common, and is grown generally on riverside lands after *biali* paddy. It is sown broadcast or in drills, and is often mixed with *birhi* or *kultha*, which are plucked before the *harar* has attained its full growth. Oftener, however, it is sown by itself, the yield of *kultha* and *birhi* when thus grown being very poor. It flowers in February when the plant is 2 feet to 4 feet high. In April the plant is cut down and the seed beaten out like paddy. The stems are afterwards used for cattle fodder and fuel. The yield is, in a good year, from 8 to 15 maunds* of grain. It is eaten as a pulse, but is said to be very heating. *Deo* or *nali harar* is a variety with a red grain sown on homestead lands in June-July and harvested in December. Its cultivation is the same as that of the *chaita harar*. *Chaita harar* is most largely grown in the Brahmini basin where in the scarcity of 1896-97 it was in many villages the only crop that stood between the people and starvation, and is common on the borderland of Cuttack and Puri. The autumn variety is found in western and central Cuttack and in the Puri district. I think that not less than 60,000 acres is annually planted with *harar*.

146. Of the oilseeds, one of the most important is the castor-oil bean, *gaba* or *jara*, grown on about 2,600 acres. It is of two varieties, *bai jara*, sown in May and gathered in February or March, and *chui jara*, sown in October and gathered in March. It is a peculiarity of this plant that it will grow on land deeply covered with sand, and it is usually to be found in sandy fields along the banks of rivers, or on homestead lands. If grown in a loamy soil it is sown in drills, but if in deep sand, holes must be made with a dibble until moisture is reached, when the seed is placed at the bottom. It is a prolific bearer, yielding from 100 to 200 *gaunis*, but is liable to be destroyed by caterpillars and insects. The oil is expressed in the common Indian oil mill worked by man or bullock, and the weight of oil obtained is about one-fourth of that of the beans, or from 1 to 2 maunds per acre. It is used by the poorer classes for cooking and for the anointing of their bodies.

147. Mustard (*sarishu*) is one of the most valued of the *rabi* crops and is grown on rich loamy soils after *biali* rice. It is commonest in south Cuttack, and the area under it is probably over 2,000 acres. For this crop the soil requires to be carefully prepared, and in October the seed is sown broadcast at about 5 or 6 seers per acre. It requires careful weeding and a fairly dry season, and will yield 6 to 8 maunds of seed, worth about Rs. 30. The oil is used for anointing the body and by the well-to-do for cooking.

148. Linseed (*pisi* or *tisi*) is grown after *biali* on light loamy soils. It is recorded as cultivated in about 3,500 acres, but is often found mixed with *kulthi* or *dhania* (coriander seed).

149. *Til*, locally known as *khasa* or *rasi*, is grown on fairly stiff soils, sometimes as a *rabi* but more often as a *biali* crop. The total area recorded under it is only 1,100 acres.

150. Sugarcane, or *akhu*, is grown generally on lands near the village and within easy reach of canal irrigation. Mr. Arnott states that it cannot be grown on ordinary rice land, but requires a loamy (*dorasha*) soil.

* Mr. N. N. Banerjee gives 4 maunds; Mr. Arnott, 100 to 160 *gaunis*. The latter is nearer the mark.

The field is prepared by manuring at the rate of 500 basketfuls to the acre and ploughing some thirty times in January and February. Cuttings, known as *dhangira*, are then planted in furrows about 10 inches apart and covered over with earth. When the cuttings have been planted and covered over, the field is irrigated, and the irrigation repeated every two days until the shoots sprout, which takes from fifteen to twenty days. The soil is then loosened and oilcake and mustard oil applied to the roots; the process is repeated after a fortnight and twice more at intervals of a month, the land being irrigated so as to keep it continually moist, sometimes even every two days in the hot weather.

After the fourth application of oilcake, which takes place in May or June, the soil is loosened by pulling a plough through, and the land thoroughly weeded. The stems are then wrapped in sugarcane leaves, and ten days later are tied up in a form known as *paholia* from its supposed likeness to a fishing basket. In August another thorough weeding is necessary, and after this the leaves are bound together and the plants tied together in fours to give them more power of resisting a storm. In December the canes are cut down and the juice is extracted. The mills in use are very primitive the commonest being the *kolkua* which is like the oil mill. The *khai* is a better mill, in which the canes are pressed between rollers, horizontal or vertical, turned by hand or by bullocks. The use of the Behea presses is rare. The juice is boiled down in little pans over an ordinary fire in a *chula* and poured off into jars. Sometimes it is refined by the addition of lime or ashes.

* Mr. Arnott takes the cost of cultivation at Rs. 218 per acre, Mr. N. N. Banerjei at Rs. 80 to Rs. 160, while in Balasore Mr. Kingsford estimates the cost (excluding the raiyat's own labour, manure, etc.) at Rs. 67 per acre. The estimates of outturn are equally variable, Mr. Arnott giving the value of the yield at Rs. 300 to Rs. 350 and Mr. N. N. Banerjei at Rs. 80 to Rs. 200. Experiments give an average yield of some 50 maunds of molasses, worth about Rs. 250 per acre.

151. *Kapa*, or cotton, is a crop that is said to be less largely cultivated than in former years, and is now shown in our records as occupying 2,300 acres or 1000 of the cropped area. It is grown generally on homestead lands (*kata*) irrigable from a tank or canal, or on rich alluvial soil by the riverside (*pai*).

The soil is carefully ploughed and harrowed in September and kept moist with the help, if necessary, of irrigation until the middle of October, when the seeds are sown in drills and covered over lightly with earth. Before being sown the seed is steeped in water and mixed with cowdung so as to start germination.

The land requires to be kept moist but not wet, and the plant should flower in February and the pods should be ready to gather in April or May.

The outturn is taken at about a maund of cleaned cotton per acre* worth about Rs. 20.

152. The cultivation of *nalita* or jute is at present confined almost entirely to the irrigated area in central Cuttack and Jajpur and to a few Parganas on the Mahanadi. Mr. N. N. Banerjei states that the area under this crop is decreasing, but this does not appear to be the general opinion, and I think that jute is likely to supplant cotton in many places. The present area under jute is shown in our returns as 900 acres. It is most commonly grown on homestead land, but sometimes also on riverside (*pai*) land, where an extra rent has generally to be paid for permission to cultivate it. The seed is sown about May, and in June or July the plants have to be thinned out, and later again when the plants are about three feet high the leaves are plucked off, leaving only a few at the very top.

In October the plants are ready to cut and are afterwards steeped in water for ten or twelve days until fermentation sets in. The fibres are then drawn out, or the pith beaten out against a platform.

153. The tobacco plant, commonly called *dhanpatra* or 'smoke leaf,' is one of the most valuable crops grown in the Province. It is shown in the crop statements as grown on 3,400 acres, but in favourable seasons the area planted with it is

much larger, and it is on this crop that many villages in southern Cuttack, especially in the Parganas of Saibir, Deogaon, and Sailo, depend for the payment of the rent.

It requires both a rich loamy soil and a plentiful supply of water, and is only raised on the rich silt-covered lands, on the banks of rivers and in the depressions of the big flooded '*páts*.' A mixture of sand and silt is not unfavourable to its growth, but the finest leaves are obtained on a sandy subsoil with a covering of nearly a couple of inches of pure silt.

The seed is sown in beds about the middle of September, and when about six inches high the seedlings are transplanted. The field to receive them has been carefully prepared by repeated ploughings until the soil is of the consistency of fine powder, slightly moist. In this holes are made and the seedlings carefully planted one in each hole, and have to be watered daily for the next three days and three times more on alternate days in the next week. After this, all withered or spoiled plants have to be removed, and the field is watered about once a week for the next month. When the flower-bearing shoot appears it is broken off and a week later the plant reaches maturity. It is cut off at the root and left for a couple of days in the field; the plants are then dried by alternate exposure to the sun and compression in heaps under a mat.

When dry the plants are tied into bundles and placed on dry straw.

The following account of the cost and profits of tobacco cultivation is taken from the report of Babu Jotindra Mohan Sinha who settled rents in the chief tobacco-growing area in Cuttack :—

Cultivation in this Pargana—		No. of plants
The produce of one <i>gunt</i> (.04 acre) tobacco land		4,096*
Deduct wastage		512
Net produce		3,584

These would make upon an average 100 *mentas*† or bundles, the unit of calculation.

2 *Mentas* = 1 *Joda* (couple)
100 *Jodas* = 1 *Balad* or bullock load.

The wholesale price of one *balad* varies from Rs. 20 to Rs. 10. The retail price of *menta* varies from one to two annas; so the retail minimum price of 100 *mentas*=100 annas=Rs. 6-4. The wholesale price of 100 *mentas*=50 *joras*=Rs. 6 nearly.

So the price of 100 *mentas*, the produce of one *gunt*, may be taken to be Rs. 6, and that of one *mán*=6×25=Rs. 150. But the price of the produce of one *mán* first class *sarad* land, taking it to be on an average of 4 *bharans* paddy (at the rate of 16 *gownis* in the rupee)=Rs. 5×4=Rs. 20 only.

The cost of cultivation of one *gunt* of tobacco land amounts to Rs. 2‡.

The rate of rent varies from Re. 1-8 to As. 4 per *gunt*: let us take Re. 1

So the total cost per *gunt*=Rs. 2+1=Rs. 3.

The nett profit per *gunt*=Rs. 6-3=Rs. 3.

The nett profit per *mán*=Rs. 3×25=Rs. 75.

* As a rule 16 plants cover one *padika*. The number covering a *gunt*=16×4×(16×4)=4,096. Two plants per *padika* are generally deducted for wastage, which therefore amounts to (2×4) (16×4)=512.

† *Menta*=a thin piece of dry bamboo one cubit long, on which the tobacco plants are stuck. The number of plants required to make up a *menta* depends up on the size of plants. Generally 30 to 40 plants to make up a *menta*. Here 36 plants are taken as a convenient mean.

‡ The details are as follows:—

	Rs. A. P.
Ploughing harrowing six times, man with one plough half day each time, As. 6 + As. 3	0 9 0
Transplantation, watering, &c., two men one day	0 4 0
Watering twice after transplantation, one man one day	0 2 0
Furning, &c.	0 6 0
Cutting, sewing, &c., two men one day	0 4 0
Price of seedling	0 2 0
Curing, &c.	0 5 0
Total	2 0 0

It is, however, not possible for one man to cultivate more than 6 *gunts* at a time. People having larger areas fit for tobacco sub-let them to neighbours or to the people of other villages in the Pargana.

154. *Pán*, piper betel, is the climbing vine, the leaves of which are used to wrap up the *supari* or areca-nut chewed by natives of all ranks and castes.

It is an extremely valuable crop, requiring most careful cultivation, and for the most part is grown only by the Barajis, the Baruis of Bengal, who have immigrated in comparatively recent times. In some Parganas, however, I have found *Khandaits*, and indeed all castes but Brahmins, cultivating *pán*. The finest *pán* is raised at Barkud, in the Kujang estate; but there are also valuable gardens in Kodinda close to Cuttack, in Sungra, in Parganas Jajpur and Tisania in Lembai, close to Puri town; also in Sunhaut, Dhamnagar, Bisalkhand, and Bhograí of Balasore. The total area covered by the gardens is recorded in our papers as 500 acres, but this excludes the permanently-settled estates.

The *pán* garden or *baraj* is formed by heaping up a mound of earth and carefully levelling it. Then the garden is enclosed in trolis work cage about five or six feet high to shield it from the direct rays of the sun. The plants are propagated by cuttings from the tops of old vines which are planted in rows about three feet apart, leaving a couple of inches between each cutting. They are covered with damp straw until they take root, and as soon as they begin to climb a reed called *inkar* is planted beside each and the vine trained to it by ties of *jana* grass.

In six months to a year the plants yield the first crop of leaves, and thereafter about two pairs of leaves every year; the leaves are plucked from the bottom, and every year a further layer of earth is placed over the roots until the plant withers or gets too old, which is at the end of about six years, when it is removed and a fresh cutting planted. In fifteen to twenty years the garden has grown to an unmanageable height and is abandoned, and after lying fallow for a couple of years the earth is used for building other gardens.

The plant requires watering daily in the hot weather, and every two or three days in the cold weather. It is said to suffer from too much rain, and is easily damaged by storms. It is sometimes attacked by the *dauli*, a small white larva, and a black larva, the *kalamukhi*; also by insects, such as the *ankulia pokha*.

To the cultivation of *pán* two accessories needed are water and *inkar*. The former is generally to be found in the pond formed by the excavation of earth for the garden. The *inkar* reed is generally grown close by.

The size of a *pán* garden is generally 1, 2, or 3 *gunts*, and the rent from As. 8 to Rs. 2 per *gunt*; I have found it as high even as Rs. 3 per *gunt*. It is sometimes held on a lease for a fixed period, requiring the rent to be paid, whether *pán* is grown or not, and such are the terms on which *thani* raiyats held under their last Settlement *pattas*. More often the lease is for the term of the garden, and the rent is fixed at so much a *gunt*, as ascertained by measurement. *Inkar* land is sometimes paid for separately at Rs. 3-2 to Rs. 6-4 per acre, but is often allowed rent-free with the garden.

The following account of the expenses and profits of *pán* cultivation in Balasore is taken from a note by Mr. Kingsford and shows the expense incurred during the first year, and incidentally the nature and sequence of the processes undertaken:—

The figures given are for 1 *gunt* or .08 acres of land.

January to February (*Magh*).

		Rs.	A.	P.
Materials—				
Purchase of bamboos	...	5	5	0
Ditto of <i>inkar</i> reeds	..	6	12	0
Ditto of <i>bena</i> (thatch)	...	2	8	0
Ditto of <i>noi</i> (twine)	...	1	0	0
Ditto of thatch	...	1	0	0
Ditto of 2½ maunds of manure	...	2	8	0
<hr/>				
* Carried over	...	19	1	0

			Rs.	A.	P.	Rs.	A.	P.
	Brought forward	..				19	1	0
Labour—								
For raising ground	...	...	3	0	0			
Cost of labour for erecting <i>tatti</i> , thatch, and supports	...	...	9	6	0			
For making ridges	...	...	1	2	0			
						13	8	0
						32	9	0
	February to March (<i>Phalgun</i>).							
Labour—								
Cutting grafts	...	...	0	6	0			
Transplanting grafts	...	...	1	2	0			
Covering grafts with straw	...	...	0	2	0			
Watering twice a day for the month			3	12	0			
						5	6	0
						37	15	0
	March and April (<i>Chait</i>).							
Labour—								
Watering once a day	...	...	1	14	0			
Removing straw and putting earth to roots	...	...	0	6	0			
						2	4	0
						40	3	0
	April and May (<i>Baisakh</i>).							
Materials—								
Forty bundles <i>inkar</i>	...	...	10	0	0			
One load <i>jana</i> (a kind of grass used for tying the plants to the <i>inkar</i> reeds)	...	...	1	0	0			
Manure (applied twice)	...	...	0	12	0			
						11	12	0
Labour—						51	15	0
Watering once every four days	...	...	0	12	0			
Coolie labour for tying up the plants			3	2	0			
						3	14	0
						55	13	0
	May to June (<i>Jaista</i>).							
Labour—								
Coolies for bringing earth and water			0	14	0			
						0	14	0
						56	11	0
	June to October (<i>Asar to Kartik</i>).							
Material—								
Manure (twice a month), 12½ <i>māns</i>	...	...	12	8	0			
						12	8	0
Labour—						69	3	0
Coolies for applying earth and manure twice a month	...	...	3	8	0			
Coolies for repairing ridges	...	...	1	8	0			
Do. for tending plants	...	...	3	12	0			
						8	12	0
						77	15	0
	October to January.							
Coolies' labour	...	...	2	9	0			
						2	9	0
						80	8	0
Rent	...	...	1	8	0			
						1	8	0
Carried over	...	...				82	0	0

	Rs.	A.	P.	Rs.	A.	P.
Brought forward	...			82	0	0
Material—						
Baskets and pots, for one year	...	3	0	0	3	0
		<u> </u>			<u> </u>	
Total cost for first year is, therefore	...			85	0	0

Of this amount, Rs. 47-13 is the cost of material and rent, and the remainder (Rs. 37-3) is the cost of labour. The subsequent yearly expenditure amounts to Rs. 50, of which Rs. 25 represents cost of manuring, rent, and repairs, and Rs. 25 cost of labour. Assuming the cultivator to own an *inkar* plantation, the cost will be considerably reduced. The total expenditure during the life of a garden will accordingly be as follows :—

	Rs.
Cost during the first year	...
Cost during the subsequent 17 years, viz., $17 \times \text{Rs. } 50$...
Total	...

To turn to the income, in the first place there are 25 rows of plants per *gunt*. The number of plants in each row is 240, and there are, therefore, 6,000 plants per *gunt*. The plant is a creeper with a single stem, from which leaves are thrown out in pairs and at regular intervals. It is therefore easy to gauge the number of leaves fit for plucking every month, and this number may be taken as four. The annual outturn of leaves per *gunt* is therefore $6,000 \times 4 \times 12 = 2,88,000$.

It has been noted that the wholesale price, except in the rainy season, is 1,000 leaves per rupee. In the rains the price falls to 2,000. If the average monthly price be taken as 1,500 (our estimate is somewhat under the mark), the value of the yearly outturn of leaves will then amount to Rs. $\frac{2,88,000}{1,500} = \text{Rs. } 192$. This estimate takes into consideration liability to ordinary damage.

The outturn during the first year, i.e., for two-and-a-half months from November to January, will be $2\frac{1}{2} \times 6,000 \times 4 = 60,000$, value Rs. 40.

The income for the eighteen years is therefore—

	Rs.
First year	...
Second to eighteenth year, $17 \times \text{Rs. } 192 =$...
Deduct—Total expenditure	...
Total profit	...

which represents an annual income of Rs. 131-10-0 for the eighteen years.

Moreover, this income represents the cost of management (or wages of the *entrepreneur*) only, since expenditure includes the wages of coolie labour. If, as usually happens, the labour is done by the cultivator himself with small occasional assistance from outside, his profit will be larger. Even if we assume that he simply undertakes the duty of management, his profits must be looked upon as extremely high. I have, however, considered this matter with a view of showing that the rent is quite disproportionate to the profit, and that the Baraji stands in a most favourable position compared with that of the ordinary cultivator of *sarad* lands.

The measures locally in use for *pán* gardens are—

26 muthas	= 1 aur.
4 aurs	= 1 ganda.
5 gandas	= 1 buri.
10 buris	= 1 gunt.
25 guntas	= 1 mán.

The *gunt* = .08 of an acre, or twice the size of a standard *gunt* and the *mán* = 2 acres.

155. The cultivation of the brinjal (*Solanum melongena*), locally known as *baijun*, is very general in Orissa, and it is the most important of the garden crops, though the varieties grown are said to be inferior. Seeds are sown in beds of good garden soil at about 11 seers to the acre in June or July, and are covered over

with damp straw to promote germination. After eight days the straw is removed and the plants lightly sprinkled with water, and the watering is continued every fourth day for a month or six weeks. The plants are then 6 to 8 inches high and are transplanted. They are placed either in furrows or in small circular pits, the distance from plant to plant being $1\frac{1}{2}$ to 2 feet. After planting they have to be carefully watered until they take root, when the earth is loosened and weeds cleared away. Eight days later the plants are earthed up and left alone; they bear fruit from September to January, and the later varieties, from December to March.

The cost of cultivation Mr. Arnott estimates at Rs. 27 per acre, and the selling value of the produce at Rs. 50.

They are liable to be damaged by red ants and by worms (*mandi pokha*). As a preventive ashes are used.

156. The *saru* or caladium (*Colocaria antiquorum*) produces a tuber which is very largely eaten by the people. It is grown or rich loamy soils, and often on the banks of rivers.

Caladium.

The seed requires to be first prepared by being placed on damp straw and manure. It is sown in furrows on well-manured land in March, and is then irrigated, and the watering continued thereafter every few days. The soil also requires to be periodically loosened and oilcake applied to the roots.

In June the furrows are filled up, and a month later the plant comes to maturity.

An alternative and commoner method of propagation is from tubers, which are planted in the furrows and watered as in the case of seedlings.

Other varieties of the *saru* are sown or planted as late as May and do not become mature until September.

Mr. Arnott estimates the cost of cultivation at Rs. 43 per acre and the produce at 43 maunds, worth at Re. 1-15 per maund, Rs. 80.

157. Cucumbers (*kakuri*) of many kinds are grown all over the Province in homestead lands and may be seen climbing over the roofs of the houses in every well-to-do village.

Cucumbers.

When grown as a field crop they generally follow potatoes, onions, or *saru*.

The seeds are wrapped in a piece of cloth and steeped in water for twelve hours; they are then placed in damp straw and covered over with ashes for two days, until they begin to germinate. They are then sown in little circular hollows (*manda*) about three feet apart, two seeds being placed in each *manda*.

They have to be watered regularly, and when the plants begin to grow and send out creepers the *mandas* are joined up by ridges, along which the fruit is produced.

Cucumbers may be grown both as a *biali* and as a *rabi* crop.

158. Several varieties of gourds (*lau*) are grown, and nearly every cultivator has a plant in his homestead, but on a larger-scale they are raised for the market on sandy

Gourds.

lands by the riverside.

Holes are dug in the sand two or three feet wide and of the same depth, and filled at the bottom with loose earth and cowdung ashes. In this, about October, the seed is sown. The plants germinate rapidly, and send out creepers over the surrounding sand: in November-December they flower, and the fruit is ready for consumption in December or January.

159. Some account of the value of the crops grown in Orissa will be found in a later chapter (Chapter VIII, paragraph 178) on the material condition of the people.

Value of crops

CHAPTER VII.

HISTORY OF PRICES.

160. No attempt is made to do more than give a history of prices of common rice and some comparison between the price of paddy now and sixty years ago. We can

Sources of information.

find no earlier list than that given on page 1 of Mr. Toynbee's History, where the averages for 1811 to 1817, expressed in standard seers, are—

	Seers.		Seers.
For <i>isna</i> rice	... 49	For paddy	... 118

The above figures are taken from returns of police *darogas*. Mr. Robert Cornish, in a note on prices in the Balasore District, also tells us in that in 1804 rice sold at 65 seers, but forced sales to Government in that year were made at 57 seers.

Mr. Cornish also found information as to the following years:—

		Seers.			Seers.
1815	...	78	|	1823	58
1816	..	88	|	1824	57

In 1828 the price was 48 seers, while in 1831, after the storm-wave, there was a rise up to 32 seers.

The later figures ascertained by Mr. Cornish are to be found separately treated under the Balasore figures.

The following sources of information have been referred to for compilation of information on the subject of prices:—

For Puri—

- (1) Mr. Nathan's and Mr. Walsh's reports.
- (2) Mr. W. C. Taylor's Khurda Rate reports.
- (3) Mr. H. McPherson's report on the Settlement of Puri (Sadar Subdivision).

For Cuttack—

- (4) Mr. Growse's notes of 1896.

For Balasore—

- (5) Mr. Cornish's note of 1893.
- (6) Mr. Maddox's No. 869 of 23rd May, 1895.

For the Province—

- (7) The *Calcutta Gazette* and Government of India returns.

I am indebted to Babu Jomini Mohan Das for a valuable discussion as to the value of the various sources of information. A great deal of what he has written has been reproduced below.

161. The Puri report compares the prices in all the three districts.

Puri Completion Report—Puri

For Puri we have—(1) prices of paddy compiled from various sources; (2) average prices of rice from 1861—97, compiled from monthly lists of current prices—and (3) average export (apparently wholesale) prices of rice from 1877—1897.

Up to 1893 the figures in (2) agree exactly with the prices shown in the Manual of the Government of India and both have evidently been taken from the same source. The subsequent prices agree with the prices compiled by me from the *Calcutta Gazette*.

I do not see any reason to doubt the correctness of these prices.

The prices of paddy in (1) are, however, manifestly too low, and should not therefore be relied upon. The popular ratio between rice and paddy is two-thirds, except where husking is done at home by the women of the house, when half and half is the expected outturn. The Government of Bengal has accepted $\frac{25}{40}$, which is very nearly equal to two-thirds. Making the most liberal allowance for cost of husking, the quantity of paddy which can be purchased for a rupee should not much exceed double the quantity of rice which can be purchased for the same price. It will be seen that this is very nearly the ratio between rice and paddy in the table of prices given at page 100 of Mr. Toynbee's History of Orissa, Appendix II, and the prices for 1894—97 given by the *kanungos* of Cuttack and shown in the table of Cuttack prices in the Puri reports, e.g., in Mr. Toynbee's History, the average price of *usna* rice, expressed in standard seers, is 49 seers per rupee, while that of paddy in the same measure is 118 seers.

The ratio between the prices of paddy and rice in Puri, however, differs very widely from this ratio, the average of paddy in each decade exceeding three times the average of rice. The inference which naturally follows is that the prices shown are not averages of bazar prices ruling throughout the year, but favourable prices obtained either by advances of money or at the reaping season. In the former case the interest of the money advanced should be taken into account, and in the latter case it would be unfair to make such prices the basis for determining the fairness of rent or the material condition of the

people, as the people at large cannot always afford to purchase all the food-grain they require at the most favourable season of the year. The whole sale export prices (3) should not, for the same reason, be relied upon.

The only reliable prices available for the District of Puri are therefore the average shown in the Manual of the Government of India.

162. Prices of paddy have been given for a few years only, and all of them would not stand the test referred to above. They may therefore be neglected.

Cuttack.

The prices of rice from 1836 to 1857 have been compiled from the Collector's statements of 4th and 27th July 1896, averages having been struck at various figures shown in those statements. But some of those figures appear to be so obviously wrong that they should not be included to affect the average, which would be more correct without them.

In the two statements furnished by the Collector, is it necessary to reject the figures for many years in the early period, whether on account of the measure in which the quantity is expressed, or on account of special prices being recorded for scarcity, or for lack of information as to the time at which the prices were recorded, or because a contract rate was fixed for many years which included years of famine. The following figures supplied by Mr. Growse, the Collector of Cuttack, are accepted as forming a safe basis for Cuttack figures as to prices of common rice, 1836—46:—

	1836.	1837.	1838.	1839.	1840.	1841.	1842.	1843.	1844.	1845.	1846.	Average.
1	2	3	4	5	6	7	8	9	10	11	12	13
Magistrate's No. 9 of 6th January 1842, Magistrate's Contingent Bill, and charges	S. CH. 24 2½	S. CH. 47 11	S. CH. 45 0½	S. CH. 20 1½	S. CH. 26 9½	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. 32 15
Records of Kinnu Sam, merchant of Cuttack town.	36 12	24 15	47 15	51 2	22 8	28 8	40 0	.	.	46 10	.	37 0

From 1847—60 the figures given by Mr. Growse may be accepted for Cuttack. They are as follows:—

	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.	Average.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Magistrate's Contingent Register, and charges	S. CH. 01 11	S. CH. 01 11	S. CH. 03 14	S. CH. 74 14	S. CH. 77 14	S. CH. 01 13	S. CH. 50 2	S. CH. 48 1	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. ...	S. CH. 03
Prices current, office copies in Cuttack Collector's office	32 0	32 0	...	...	52
Do. of prices of Brahman-bay bet	53 0	40 10	38 3	42 0	...	...	...	46
Do. of prices current at Patamunda and Choudan-mura bet	30 0	...	...	...	...	30
Do. of prices current at T. and S. bet	75 0	38 0	36 0	...	...	...	...	40

For 1861 and later periods the lists published by the Government of India are taken.

163. Turning to Balasore, we have a very valuable note by Mr. R. Cornish.

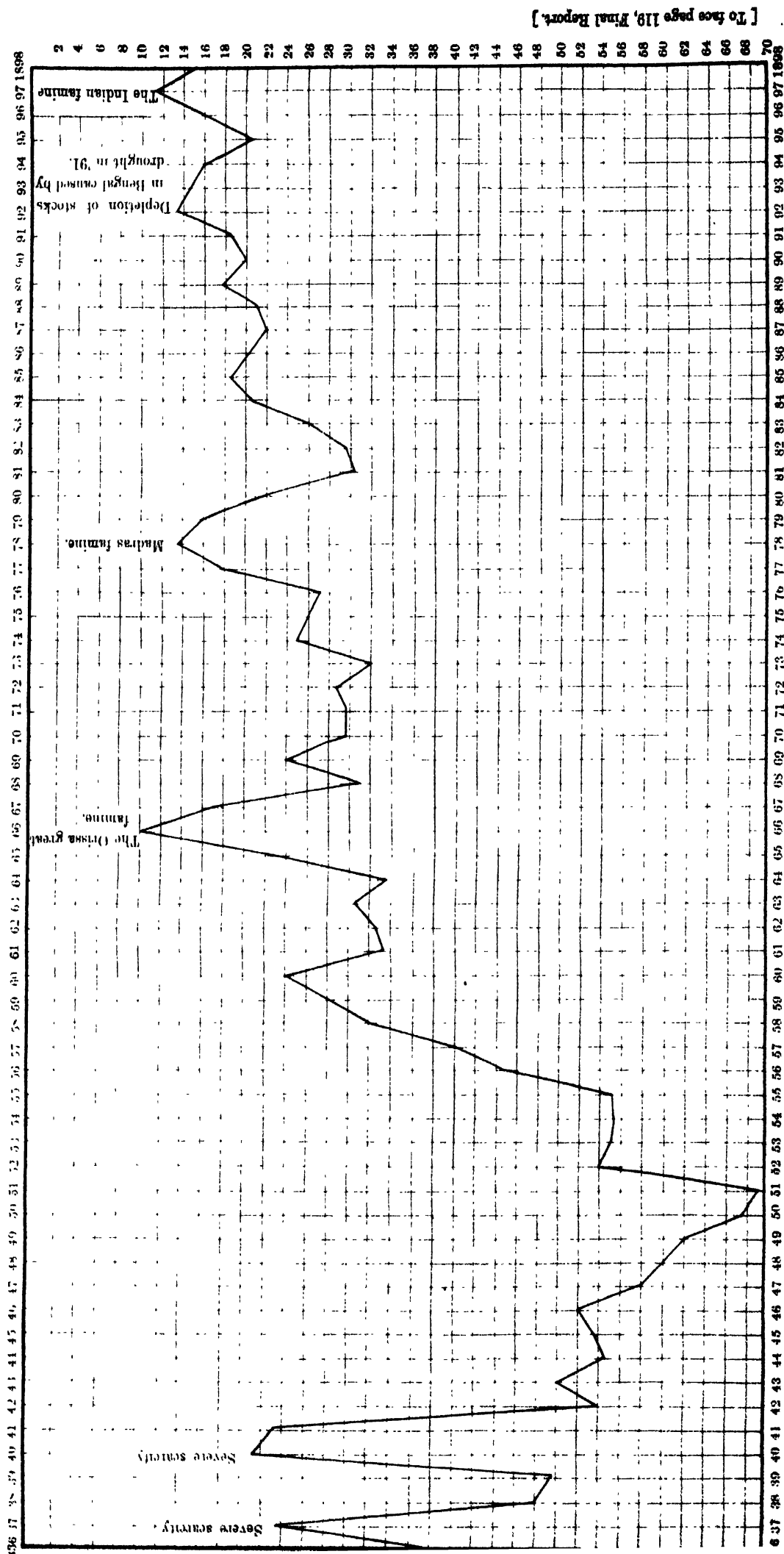
Balasore—Mr. R. Cornish's note

The figures which I had collected are for paddy, so that it is not possible to make use of them.

Mr. Cornish gives us the following prices:—

	Sacs.		Sacs.
1804 ...	65	1832 ...	27
1815 ...	78	1833 ...	30 (average).
1816 ...	88	1834 ...	30
1828 ...	48	1835 ...	71
1831 ...	32 (after the storm-wave).	1836 ...	45 (average).

DIAGRAM SHOWING FLUCTUATIONS IN THE PRICE OF COMMON RICE IN ORISSA FROM 1836-98.



[To face page 118, Final Report.]

	Seers.				Seers.
1839	... 35			1850	
1840	... 40			1851	
1842	... 68			1852	... 59 (average).
1843	... 50 (jail contract).			1853	
1844	... 72			1852	... 36
1845	... 60			1853	... 48
1847	... 54 (average).			1855	
1848	... 60 (jail contract).			1856	... 47 (average).
1849	... 63 (jail contract for 1850).			1857	
				1858	... 25.5
				1859	... 28.3
				1860	... 23.9

Returns of Collector
to Famine Com-
missioner.

For 1837, 1838, 1841, 1846, 1854 Mr. Cornish has no figures.

From 1861 onwards the prices published by the Government of India may be accepted as fairly reliable. The prices in each District are checked by those ruling in the other two since the great famine. Owing to the great improvement in communications, prices have moved very nearly within the same proportion from year to year. From 1894-98 those figures must be supplemented by figures published in the *Calcutta Gazette*.

The figures which are recorded below are, therefore, mainly derived from the printed notes of the Collectors of Cuttack and Balasore.

Averages worked out from the statistics compiled from the *Calcutta Gazette* agree very nearly with the Government of India figures, which were probably compiled from the same source.

164. From the above-mentioned sources we obtain the following information :—

Statement showing the average price of common rice in Orissa.

YEAR.*	Annual average price in seers (of 40 tolas) per rupee.	Decennial average.	YEAR.	Annual average price in seers (of 40 tolas) per rupee.	Decennial average.
1836	... 43.13		1867	... 16.37	
1837	... 21.56		1868	... 31.27	
1838	... 47.75		1869	... 24.14	
1839	... 48.85		1870	... 20.71	
1840	... 21.16	43.20 and	1871	... 29.66	
1841	... 21.50	48.14, ex-	1872	... 28.47	26.87
1842	... 54.00	cluding 1837	1873	... 32.43	
1843	... 50.00	and 1840.	1874	... 24.37	
1844	... 54.37		1875	... 25.61	
1845	... 53.75		1876	... 26.72	
1846	... 52.50		1877	... 17.65	
1847	... 57.87		1878	... 13.70	
1848	... 59.56		1879	... 15.69	
1849	... 61.94		1880	... 20.59	
1850	... 67.19		1881	... 30.38	
1851	... 68.69	57.94	1882	... 29.98	21.26
1852	... 54.75		1883	... 26.70	
1853	... 55.19		1884	... 19.86	
1854	... 53.81		1885	... 18.34	
1855	... 55.50		1886	... 19.77	
1856	... 44.94		1887	... 22.09	
1857	... 40.56		1888	... 20.99	
1858	... 31.25		1889	... 17.08	
1859	... 28.31		1890	... 19.68	
1860	... 23.87		1891	... 18.57	
1861	... 33.18		1892	... 13.39	18.28
1862	... 32.84	28.58	1893	... 14.78	
1863	... 30.29		1894	... 15.68	
1864	... 33.87		1895	... 21.63	
1865	... 21.90		1896	... 18.40	
1866	... 9.76		1897	... 11.87	
			1898	... 14.84	

* 1836-60 compiled from the printed notes of the Collectors of Balasore and Cuttack.
1861-98 compiled from the prices published by the Government of India.

1894-98 compiled from the *Calcutta Gazette*.

Averages for 15 years :—

1837-51	... 49.77
1852-66	... 42.67
1867-81	... 24.85
1892-98	... 19.79

165. As I have already shown, it is very difficult to get authentic information regarding prices of paddy. Mr. Nathan

Prices of paddy.

certain *maths* and private persons, and I obtained information from zamindars and others in Balasore for about sixty years. I give the following extract from Messrs. Nathan and Walsh's figures and my own to show that our figures justified almost the same enhancement on the ground of rise in prices, though they obtained figures in the south of the Province, and mine were obtained from the north :-

		Period.	Price of paddy per maund in seers of 80 tolas. Rs.	Period.	Price of paddy per maund in seers of 80 tolas. Rs.	Per- centage of increase in prices.
I.	Mr. Nathan's and Mr. Walsh's figures for Puri ...	1836-45	0 18	1883-92	0 60	233
II.	Mr. Muddox's figures for Bala- sore ...	Do. ...	0 29	1885-94	0 92	217

The enhancement on the ground of rise in prices is worked out by Mr. W. C. Macpherson as follows:—

I. 1:255 as 100:255; or, 155 per cent.

II. 1:2.45 as 100: 245; or, 145 per cent.

As regards the price of paddy between 1836 and 1845, I may add that Mr. W. C. Taylor's average price given in Khurda Selections, Volume II, page 114, exactly agrees with mine.

It will be seen by the comparison made in paragraph 43 of my covering report to Mr. J. Taylor's report on the Settlement of Khurda that in Khurda prices throughout the century have ruled higher than in the Puri Sadar subdivision. This is probably due to the large export by road and to the frequency of the Ganjam famines.

166. In accordance with Circular No. 10 of 12th February, 1898, issued by me to Assistant Settlement Officers, chakla kanungos were summoned before them with the registers in which prices had been recorded by the kanungos under Board's Circular No. 6 of June, 1888. The original registers having been produced, extracts for prices from 1887 to 1896 were recorded, signed, sealed, and attested by the kanungos in the Assistant Settlement Officer's presence, and after counter-signature by the Assistant Settlement Officers have been sent to head-quarters. These returns have been bound in registers and are to be made over to the Collector of each District. It is hoped that at a future Settlement these lists may give evidence of prices in local areas.

The general results are recorded as follows:—

Statement showing the price of common rice from 1887 to 1896 in seers (80 tolas) to the rupee.

[illegible]

		1887.	1888.	1889.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	AVERAGE FOR DROUGHT-WIAL PERIOD (1887 TO 1896).				
NAME OF OFFICER.	Name of Chakla.	January.	June.	September.	January.	June.	September.	January.	June.	September.	January.	June.	September.	January.	June.	September.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
DISTRICT CUTTACK—conold.																
Babu Shyama Charan Sen.	Tirtol	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Satis Chandra Guha.	Tendakura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Amritasikher Mukherjee.	Nayagaon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Debendra Prasad Roy.	Jagatsingpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Jaminimohan Das.	Jajpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Khitab Chandra Borker.	Tirtol	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Hiralal Banerjee.	Tendakura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Jatindra Mohan Sinha.	Bahugrain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Beni Madhab Chatterjee.	Jaganathpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Jamini Mohan Das.	Patamundni	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Siram Ch. Bose.	Chandol	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Avantapur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DISTRICT BALASORE.																
Babu Debendranath Mooc.	Kamarda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Bhadrak	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Hara Krishna Mahanty.	Doleahali	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dhamra	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Agarpada	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Chandbali	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Abhay Prasad Das.	Basudhupur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Balasore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DISTRICT PURI—BADAR SUBDIVISION.																
H. McPherson, Esq. J.C.S.	Pipli	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nagpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kandee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kakatpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Babu Akhoy Kumar Sen.	Kalans	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Kanung	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gope	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Brangir	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
DISTRICT PURI—KHURDA SUBDIVISION.																
James Taylor, Esq.	Ranpur	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Gankia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Dandimal	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Hogunda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Khurda	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

167. A list of wholesale prices prevalent in the mufassal between the years

1811 and 1817 is given in Appendix III, at page

Prices of other commodities.

100 of Mr. Toynbee's History of Orissa, and it

will be interesting to compare it with present prices as given in Appendix O to this report. This is done for a few of the commoner articles of merchandise in the following table:—

Name of article.		Average of 1811 to 1817 per standard maund.			Price in 1899 (average per standard maund).		
		Rs. A. P.			Rs. A. P.		
Birhi	...	0	15	6	2	4	6
Harar	...	1	14	6	2	12	0
Salt	...	3	4	0	3	10	0
Ghi	...	15	0	0	33	0	0
Cotton yarn	...	43 0 0			16 0 0*		
		to					
Sugar	...	25 0 0			40 0 0		
		8 8 0			4 12 0†		
Betelnuts	...	7	0	0	7	0	0
Tobacco	...	5	0	0	15	0	0
Lamp oil	...	9	10	0	5	0	0
Cocoanut oil	...	21	8	0	15	8	0

* Foreign.

† Molasses.

‡ Refined white.

This list shows a great rise in the price of agricultural produce, pulse, ghee, and tobacco ; while cotton yarn and oil have cheapened, and there is but little change in sugar, salt, or in the betelnut which every Uriya chews. Thus the cultivating classes gain both on the better price they get for their surplus produce and the smaller price paid for their imported luxuries.

CHAPTER VIII.

MATERIAL CONDITION.

168. Abul Fazl considered the Uriya to be very effeminate, and early writers such as Stirling and Ker describe what they term the intellectual dulness of the Uriyas. Stirling concludes his remarks by saying :—

"In justice, however, to the bulk of the agricultural population, it must be said that the raiyats of Cuttack are extremely industrious, though they work with little spirit or intelligence, and altogether the Oorias of the plains, whatever their faults, are certainly the most mild, quiet, inoffensive, and easily managed people in the Company's provinces."

He also mentions—

"The Balasore bearers, in whom the virtues of fidelity and honesty (according to their own conceptions of those qualities) are conspicuous."

These early impressions have never been eradicated, and to this day Orissa is by general consent the Boootia of Eastern India.

This low opinion of the Uriya is not wholly without justification, but it is equally certain that there is much to be said on the other side, and the following criticism taken from paragraph 34 of the report of the Famine Commissioners of 1866 holds good to the present day :—

"The people of Orissa are also separate and distinct, of a character and language peculiar to themselves. Their personal character has been a subject of much discussion during our enquiry, and opinions are much divided about it. The Oriyabs are, we should say, physically somewhat larger-boned and not so slight-looking as the average Bengali, though they would be at a disadvantage compared with other Indian races. Their features are on the whole good, and both features and language indicate that they are to a great degree Aryan in race. Most of them are very Hindu in religion and have much caste prejudice. The truth respecting their character is probably to be found between the two extremes of opinion. They seem to be certainly less quick and pushing than the Bengalis, and the higher classes have had much less education, it may almost be said no education ; in fact, they are altogether more Boootian. On the other hand, we do not see reason to believe that they are in their own way less industrious ; they have a certain intelligence of their own, and are thought to be less skilled in fraud and in some respects more reliable. They come freely to Calcutta for service, and may be said to bear a good character there. In short, those who are accustomed to them and have become habituated to their obstinate and prejudiced ways, generally like them ; those who are not accustomed to them cannot endure them. The well known Uriya bearer, so common in the European domestic service of Lower Bengal, is probably a very fair type of his country men."

The labouring classes and the lower castes of cultivators are somewhat stupid ; but for that matter the peasant of Bihar or of Western Bengal is but little, if at all, cleverer, and physically is certainly inferior. The Brahmans are obstinate and bigoted, but they are of a refined and intellectual type, and the Mahantis of the Mahanadi valley have quite as high a reputation for acuteness as the Lalas of Bihar. In our work we have had no difficulty in finding hundreds of vernacular knowing muharrirs, writing a good Uriya hand, fair arithmeticians, and for the most part careful and not unintelligent. Some of these men have shown considerable ability and a most creditable capacity for methodical work, and have been found perfectly reliable.

Even, however, among the literate class, the want of enterprise, the slowness, and the hopeless conservatism are in marked contrast to the versatility and quickness of their Bengali cousins. An Uriya can hardly be made to hurry himself, and he regards absence without leave and disregard for orders as the most venial of offences. He would as a rule far rather make Rs. 12 a month by a moderate amount of work than half as much again by staying over time. The same love of ease and dislike of hard work permeates all classes. When times were hard and numbers of agriculturists were driven to do earth-work on the railway, they might easily have earned four annas or more a day, but as a rule they would only make two annas or three annas, and then would go home for a rest two days in the week.

There is no doubt that the last century of unrest and oppression by the Moghuls and specially by the Mahrattas, before the British accession, made some permanent effect in the Uriya character. To sow year after year without knowing by whom the fruits would be gathered, to be continually harried and plundered must necessarily discourage thrift and promote improvidence. For this reason it seems to me that in his own country at any rate the Uriya is not disposed to be a hard worker. Outside Orissa, as domestic servants, chuprasies, and coolies, the Uriyas have a reputation for good work, which may in part be accounted for by the natural selection of the best of the young men as emigrants and their natural fitness for the duties in which they are commonly engaged, and in part also to the unfitness of the Bengali.

We find the Uriya cultivating the lands of well-to-do Bengalis, who themselves are engaged in the jute trade or in selling dairy products in Calcutta. We find them as carpenters, making doors, boxes and tables, as pullers of punkhas, as dockyard labourers, as *palki* bearers, and generally in most kinds of labour requiring more physical than mental capacity.

Generally speaking, the people are kindly and good humoured, remarkably law-abiding, and given only to the committing of the pettiest of crimes. A contractor, employing large numbers of labourers from all parts of the country, put the difference between the Uriya and the up-country man in these terms: "If I give an advance to an up-country man, he will first think how he can cheat me out of part of it. If he gets a chance, he will decamp with the money; if not, he will try to get inferior work passed. The Uriya on the other hand will, sooner or later, work off the value of the advance, but without the slightest consideration for the time within which the work should have been completed."

Physically, the men of the better castes are well-made, with good shoulders and straight backs. Except among the Brahmans and the naturalised Bengalis, infant marriage is unknown, and the last census showed only 1.93 per cent. of girls under ten to be married. In most castes widows may re-marry, and even among Brahmans and Karans do not lead the hard life that they do elsewhere.

169. The consequence of this marriage system is seen in the rapid development of the population, which in 1872 was returned at 30,34,690, and in 1891 had increased to 38,77,294, or by 28 per cent. At a moderate estimate, the population must in the last eight years have increased by 8 per cent. and may be taken at 42,00,000, viz:—

Population.

		Males.	Females	Total.
Cuttack	...	1,020,000	1,080,000	2,100,000
Balasore	...	520,000	560,000	1,080,000
Puri	..	510,000	510,000	1,020,000

Of these we may take to be Hindus 4,090,000; to be Mahomedans 98,000; to be Christians 4,000; leaving 8,000 to be divided between Parsis and other denominations.

170. The following table, showing the distribution of the people according to their occupation, has been prepared from the census returns, making due allowance for the increase of population:—

Name of District.	Class A. Government.	Class B. Pasture and Agriculture.	Class C. Personal service.	Class D. Preparation and supply of Materials.	Class E. Commerce, Transport and storage.	Class F. Professional.	Class G. Indolent and Independent.
Cuttack	37,000	1,126,000	125,000	373,000	46,000	67,000	334,000
Balasore	10,000	826,000	22,000	95,000	10,000	16,000	100,000
Puri	13,000	561,000	44,000	200,000	12,000	43,000	147,000
Total	60,000	2,513,000	191,000	668,000	68,000	126,000	581,000

These figures are but an approximation, but they are not likely to be far out. The most striking feature of them is the very much larger proportion of the population returned as agricultural in Balasore than in the other two districts, and the smaller number of persons engaged in manufacture, such as

weavers and brass foundry. In Balasore it is to be noted the culturable area is still comparatively more extensive than in the other districts.

171. As to education it may be assumed that the Karans and Kayesths, who form about 4 per cent. of the people, can all read

Education.

and write, and so can all those in classes A and F, and most of class E. The census returns showed the proportion of literate persons and pupils as altogether 6·7 per cent. of the population, and with the impulse given to reading and writing by the settlement it is probable that the percentage is increasing fast.

The census figures of 1891 showed that of males between the ages of 19 and 49, 85 per cent. were married, 4 per cent. widowed, and 11 per cent. unmarried, and of women between the ages of 15 and 49 only 3 per cent. were unmarried, 77 per cent. married, and 20 per cent. widows.

172. It is very difficult indeed to get any accurate understanding of the material prosperity of the people at large.

Material condition.

Enquiries at once put the villager on his guard, and he makes such answers as he thinks will conduce to his gain, without any great regard for the truth. The general opinion of the officers who have for years worked among the people and gained their confidence is that 80 per cent. of the rural population are more or less permanently indebted to the *mahajan*, proprietary tenureholder, or zamindar. The remainder are themselves landed proprietors, or have other means of maintenance than agriculture. It does not, however, follow that because the villager is in debt and has no capital or savings to meet the strain of a bad season that he is very much to be pitied. The *mahajan* is almost always a local man, and generally the tenant cultivates the fields over which the *mahajan* has a lien. Again, the proprietary tenureholders are local men, and frequently have stocks of grain. Advances of grain for food and seed are not infrequently given by zamindars, especially in times of scarcity, and are repaid by return of the principal with 25 per cent. interest when there is a sufficient crop. Such conditions, however, become oppressive when for two years in succession there is scarcity. The Uriya cultivator is content with very little and that he generally gets. A full meal of rice once a day, taken with a little salt, some pulse or vegetables, and perhaps fish, suffices him, and he eats cold in the morning what is left over from his evening repast. Animal food is a luxury, but well-to-do men eat a little mutton and goat's flesh, and all classes eat game whenever they have the luck to kill any. The poorest classes take to supplement their rice boiled *kulthi* and *mandia* cakes, and find a substitute for vegetables in the many herbs and grasses that grow wild, and it is very few indeed who cannot fill their bellies with food which, if not appetising, is certainly satisfying. If the harvest fails or supplies run short, the cultivator finds in the *mahajan* a banker always ready to advance money on good security, and able and willing to tide him over hard times, provided there is no abnormal general distress; and the history of the floods and drought of 1896 shows that the agricultural community can withstand very serious calamities if the bad season is followed by a good harvest in the next year.

Indeed, the increase of population is in itself a sufficient proof that the people are habitually maintained above the level of the minimum standard of comfort compatible with the health and reproductive power of the species.

For a further investigation of this subject I propose first to consider the wealth of the country as a whole and the sufficiency of its food supply. Then to discuss the condition of the several classes of persons in the country; and lastly to give some account of the natural calamities to which Orissa is subject and of the possible remedies.

The wealth of Orissa.

173. The wealth of Orissa may be said to consist of—

(1) Its agricultural products.

(2) Its live-stock.

(3) Fisheries.

(4) Manufactures.

(5) Forests and mines.

Of these the last two are but of small importance, and I will deal with them first.

174. The most important manufacture is that of salt, of which 162,551 maunds were manufactured in 1897-98 and 195,000 maunds in 1896-97. The East Coast

Manufactures.

Railway, which brings cheaper salt from Madras, threatens to ruin this industry.

The only other article manufactured for export is the silver filigree work of Cuttack, which is highly prized everywhere, but it does not give occupation to any but a very insignificant portion of the urban population.

Brass and bell-metal utensils and ornaments, coarse cotton cloth and certain other articles manufactured for local consumption supply nearly all the wants of the people, who require very few such articles of foreign manufacture.

The artisans who manufacture these articles form in fact a component part of the village organisation, some of them still holding service lands for their work.

175. There are extensive stretches of forests along the sea-board and the western boundary of the Regulation Districts, which can supply all the firewood required; but the difficulty of communication is so great that except in the big towns the people generally use dried cowdung as fuel. Large quantities of bamboos and wood are annually brought down from the western hills in the Tributary Estates for building purposes.

There are reserved and protected forests under the Forest Department in the Khurda Government Estate.

176. Minerals in Orissa are the property of Government, but there are at present no mines, and it is not likely that any will be opened in the near future. (See the discussion regarding the terms of the *kaibiyat*, Appendix A, and paragraph 262.)

Sandstone, laterite, and rubble are quarried from the hills in the western border, but only for local consumption. Coal has to be imported.

177. The nature of the crops grown and the method of cultivation has been discussed in Chapter VI, and the question to be here considered is the sufficiency of the food-stocks and the margin available for purchases.

178. By far the most important article of food in the Province is rice, which, with a comparatively smaller quantity of pulse (*dal*) and vegetables (and among the well-to-do class some fish and flesh), forms the daily meal of the Uriya.*

The first difficulty in estimating the food-stocks and their sufficiency is to ascertain the outturn per acre and the area cropped; the second, to find the average consumption per head. The area we may take from the statements of cropped areas prepared in the course of the settlement proceedings,† making an addition on account of the areas excluded from settlement. For Kujang, Kanika, and Bariki correct figures are to be had; in other unsurveyed estates I have assumed half the total area as under rice.

The outturn of rice I estimate at $13\frac{1}{2}$ maunds (standard weight) for irrigated, and 12 maunds per acre‡ for unirrigated land. From the latter figure some further deductions have to be made for losses by flood and drought. The Commissioners who enquired into the difficulties connected with the Orissa Canals estimated the average annual loss from drought at one-twelfth and that from flood at one-tenth of the total crop. These figures agree with my own conclusions, and I would accept them, applying the loss from drought to the whole unirrigated area, but that from floods to one half only, as about half the unirrigated area is safe from inundation.

The average produce of an acre of unirrigated rice land, good years and bad, is therefore $12(1 - \frac{1}{12} - \frac{1}{2} \times \frac{1}{12})$ maunds = $10\frac{1}{2}$ maunds. This is for the winter rice only. For *biali* and *dalus* rice and the millets I take the average outturn of food-grain at about 8 maunds, and for the pulses and other *rabi* crops 5 maunds per acre.§

These figures are a little lower than those assumed by the Collector in his report on the failure of crops in 1898, when the calculations were made on an average yield of 11 maunds of winter rice, $9\frac{1}{2}$ maunds of autumn rice, 10 maunds of spring rice, and 9 of *rabi* food-grains per acre; but if the losses in

* See Appendix O.

† See Appendix F.

‡ *Ide* paragraphs 137 and 109.

§ Probably it is more in most years, but I have adopted this figure in deference to the low estimates of Mr. Nathan and Mr. N. N. Banerji.

abnormally bad years are to be taken into account in striking an average, I do not think my estimate can be very far wrong.

As to consumption, the Famine Code allows 12 *chataks* of rice and 2 of *dāl* for an adult male labourer, half of this for a child, and for a woman 10 *chataks* of rice and 2 of *dāl*.

In the Behar famine of 1874, 12 *chataks* of all food-grains for an adult, and two-thirds of this for a child was the allowance, and the Jail Code gives a figure intermediate between these two estimates.

Sir Antony MacDonnell took the average consumption of the agricultural population at three-fourths of a seer per head, and in 1874 Mr. Commissioner Ravenshaw* put the average consumption in Orissa at half a seer per day for every man, woman and child, and Mr. N. N. Banerjei gives half to three-fourths of a seer of rice as the consumption of an adult Uriya†. We may, I think, assume that the consumption for adults is not more than 12 *chataks* of rice a head, and that for children 6 *chataks* a head, giving an average of 10 *chataks* a head, besides fish, vegetables and green food.

In famine time the people will live on much less‡, but in an ordinary season this is a safe average for Orissa.

The following statement shows the estimated area under the principal food-crops and the estimated outturn:—

Crop.	District.	Area cropped in acres.	Estimated outturn in Maunds= 82·14 lbs.
<i>Biali</i> rice	Outtack	135,000	1,080,000
	Balasore	10,000	80,000
	Puri	40,000	320,000
<i>Sarad</i> rice	Outtack { Irrigated	185,000	...
	Unirrigated	815,000	10,974,000
	Balasore	850,000	8,840,000
<i>Dulua</i> rice	Puri	650,000	6,000,000§
	Outtack	17,000	136,000
	Balasore	1,000	8,000
<i>Mandia</i>	Puri	6,000	48,000
	Outtack	30,000	240,000
	Balasore	Nil	...
Other food-grains...	Puri	15,000	120,000
	Outtack	170,000	850,000
	Balasore	12,000	60,000
	Puri	65,000	325,000
Total food-grains...	.....	3,001,000	29,081,000
Sugarcane	Outtack	1,000	...
	Balasore	500	...
	Puri	3,000	...
Oilseeds	Outtack	8,000	...
	Balasore	500	...
	Puri	9,000	...
Other cropped areas	Outtack	50,000	...
	Puri	30,000	...
	Balasore	30,000	...

179. Taking the population at 4,200,000 and their average consumption of food-grains at 10 *chataks* per head, the average requirements of the Province are $4,200,000 \times 365 \times$

$\frac{10}{18 \times 40}$ or 23,703,000 maunds of rice per annum. To this we must add some 2,500,000 maunds of seed, bringing up the total to about 262 lakhs of maunds. This leaves an available surplus of 29 lakhs of maunds. This is clearly a little high, for the actual exports by sea in 1897-98 came to 26 lakhs of maunds, and it must be remembered that the estimate is for the average of a cycle of years, including those of scarcity, and that in a year of plenty like the last both production and consumption are much above the estimate. Probably in such a

* Note on Col. Gulliver's memorandum printed at page 63 of Selections from Correspondence on Orissa Canals.

† Page 31 of Agriculture of District of Outtack

‡ Famine Commissioner's report, paragraph 86, Part III. They take 1 lb of rice as sufficient.

§ Owing to the great inferiority of much of the Puri land, I have taken the outturn at about a maund per acre less than the other districts.

year 40 to 50 lakhs of maunds should be added to the normal outturn, of which 25 lakhs above the average were eaten and as much more went into reserve.

Anyhow, the figures show that in any ordinary year there must be a considerable excess of production over consumption, and that, on the average of a number of years, the outturn of food-grains after allowing for the amount required for seed leaves nearly three-fourths of a seer per head.

180. To the plain meal of rice and pulse there are nearly always added some vegetables. Fish and vegetable curries form a favourite dish, and spices are used to season and add flavour. The vegetables most largely grown are —

Baigun or Brinjal.
Saru or Caladium.
Onions.

Yams.
Radishes.
Cucumber.

Gourds and Pumpkins.
Plantain.

The latter, though perhaps strictly a fruit, is more eaten as a vegetable, and with the *baigun* forms the basis of most of the vegetable curries.

None of these vegetables are exported, as they are generally inferior in quality and barely suffice for the wants of the people. Potatoes have recently been introduced and are grown with some success near Cuttack, but are not much eaten outside the town.

Spices, turmeric, chilli, coriander, mustard and ginger are used largely in cooking and the supply is not equal to the demand, so that there is a considerable import, especially of the more valuable kinds.

181. The principal fruits found in Orissa are the mango, jack, papaya, custard apple, pineapple, plantain, cocoanut, and palmyra palms. The *barl*, the cashew nut, the wild plum, and other fruits are also found, but are of less importance.

Mangoes form a very valuable addition to the food of the people in a good year such as 1897, when they certainly helped to keep the Province going until the *biali* harvest was reaped. The quality is inferior to that of the mangoes of Malda or Bombay, and the outturn very precarious.

Pineapples are grown in many villages, but are not plentiful enough to form a very valuable article of food. Plantains are grown in the gardens of many well-to-do persons, but are most used as a vegetable. The cocoanuts form a very valuable crop, of which there is a considerable export, and are eaten both while young and when fully ripe. The fruit of the palmyra tree is usually eaten young, when the kernel or *talsaj* is considered a great delicacy. When mature, however, it forms a useful article of food boiled with a little rice flour, and numbers of persons are said to have lived on it in the famine of 1866. Except of cocoanuts, there is no balance of any fruit available for export.

182. Spinach (*Sag*) is a very common article of food in Orissa, and a portion of the homestead called *saghari* is invariably set apart for growing it. A little *sag* fried in oil often takes the place of *dal* and curry. The following varieties are ordinarily grown in *baris*—

(1) *Neulia*.
(2) *Kosala*.

(3) *Bathua*.
(4) *Khara*.

(5) *Piranga*.
(6) *Poi*.

The following varieties which grow wild are also largely consumed

(1) *Puruni*.
(2) *Paunsapsnaia*.
(3) *Kansari*

(4) *Moti*.
(5) *Kanta neulia*.
(6) *Suni sunia*.
(10) *Madaranga*.

(7) *Kalama*.
(8) *Gaicha*.
(9) *Pitagahama*.

Puruni, *madaranga*, *moti*, and *kalama* (water herb) are in times of severe scarcity boiled and eaten with a little salt. *Puruni* and *kalama* are very rare, but the country contains a sufficient supply of *madaranga* and *moti* to keep alive about 2 per cent. or 40,000 persons for about eight months from *Kartick* to *Jaishtia*. But these herbs should not be regarded as a food reserve for human beings, as on failure of straw they must take its place as fodder for cattle.

The following roots are eaten ordinarily by the low caste people and in times of scarcity by more respectable people

(1) <i>Bano Ola.</i>	(4) <i>Koraba.</i>	(7) <i>Koi Munda.</i>
(2) <i>Tunga Alu.</i>	(5) <i>Pitamasia.</i>	(8) <i>Mar Marua.</i>
(3) <i>Sankha Alu.</i>	(6) <i>Surkuti.</i>	(9) <i>Bhuin Kakharu</i>

These are available almost throughout the country.

183. Fish abound in the tanks and rivers, and are eaten by all classes and castes. The chief supply is derived from the

Fisheries.

Chilka Lake and the larger rivers, in which numbers of fish are caught and either eaten fresh or preserved by drying in the sun. This dried fish, or *sukwa*, is highly odoriferous, and not likely to be appreciated by foreigners until some better mode of curing is adopted; but it is much eaten by boatmen, carters, *et hoc genus omne*.

In the rains fish get into the rice-fields and are caught by the boys as the waters subside, and form a welcome addition to the family meal of those who cannot afford to buy such luxuries.

It is very difficult to estimate the value of the fish eaten, but the minimum consumption per house must be a rupee's worth a year, which would give the value at 10 lakhs.

184. After food-grains, cattle form the principal wealth of the people.

Live Stock.

Large herds are grazed during the hot weather on the *palanda* lands of Kujang and Kanika and the other estates near the coast, and in the rains are driven off to the jungles of Khurda and other high tracts; their flesh is but rarely eaten even by Mahomedans, but milk and ghi are consumed in the country by well-to-do persons.

Unfortunately, there are no complete statistics of the number of cattle in the Province or of the number exported for sale, but a considerable number are known to be sold every year.

Sheep and goats are met with everywhere in considerable numbers. The goats are kept both for their milk and their flesh, which is eaten by Hindus, except by Brahmins and Baishnabs; a good many are also exported for sale.

From Survey returns for eleven Parganas in Cuttack, I find that in an area of 243 square miles containing 45,800 houses there were 40,400 bullocks, 46,300 cows, 700 buffaloes, 3,200 goats, 3,600 sheep, besides small numbers of other domestic animals. There are in this area 18,200 ploughs. We may take it then that there are nearly 200 plough cattle, and rather more of other cattle to the square mile: say for the Province 1,000,000 plough cattle, and as many cows besides 200,000 sheep, goats, and pigs. Their value is difficult to estimate: at half a seer of milk a day a cow's yield should be worth Rs. 6 per annum; the value of the calves may be set off against the cost of feeding. Sheep and goats must bring a profit of at least Rs. 2 each per annum.

185. I think it has been made clear that the Province produces much more than is sufficient to feed it, and we are in a position to make an estimate of its wealth, excluding interest on capital and value of labour.

Total wealth of available.

	Rs.
Value of food-grains less amount for seed at Rs. 2-4 per maund ...	6,50,00,000
Oilseeds and other agricultural produce ...	50,00,000
Live stock and dairy produce (excluding value of purely agricultural cattle) ...	60,00,000
Salt ...	4,00,000
Fish ...	10,00,000
Manufactures, etc. ...	100,00,000
Total ...	8,74,00,000

or Rs. 22 per head of the population.

Now out of this we must first deduct the amount consumed as food or used for clothing, etc., and the balance must suffice to pay the taxes and the price of all articles imported from abroad, besides leaving a surplus for remittances to absentee proprietors. We must assume that this balance is all exported.

The taxation of Orissa is roughly as follows:—

				Rs.
Land Revenue...	...	...	...	24,00,000
Excise	...	...	...	6,60,000
Stamps	...	...	...	5,00,000
Registration	...	...	...	40,000
Road Cess	...	...	...	1,35,000
Public Works Cess	...	...	...	1,35,000
Municipal taxes	...	...	...	1,15,000
Income tax	...	...	...	80,000
Water Rate	...	...	...	3,15,000
Dak Cess	...	...	...	20,000
Total				43,80,000

Imports by sea in 1897-98 were valued at 82½ lakhs, but this includes rail-way material which being deducted leaves 78 lakhs as against 67 lakhs in the previous year. To this we must add imports by road, river, rail and canal, and I think we may take the total imports of the Division at 80 lakhs of rupees.

The remittances to absentee landlords who spend their money in Calcutta cannot be placed at less than 2 lakhs.

The value of the exports by sea in 1897-98 were returned at 96½ lakhs and we may safely add another 3½ lakhs for grain, cattle, and other produce exported by rail or road. The total exports will then stand at 100 lakhs, of which 80 lakhs are for food grain, 5 lakhs for hides, and the rest made up of various articles of minor importance.

There is thus a large apparent surplus of expenditure over income, which may in part be accounted for by the remittances of emigrants.

The census tables show that there are about 72,000 Uriyas living out of Orissa, and most of these are in service earning good pay and remitting money by money-order or *hundis*. Taking their savings at Rs. 40 per head, the total amount would be nearly 28 lakhs, and I think the remittances may be put down as 20 lakhs. The postal returns show 27 lakhs of money-orders received and most of this is from other districts, so that the above estimate is not excessive.

Even so, the accounts will not balance; but the reason is that the equation is by no means so simple as it appears. A great deal of the money collected as taxes finds its way back into the pockets of the people as wages of employes and labourers, so that no accurate adjustment can be expected, but I believe that these estimates, rough as they are, give a fair idea of the income and expenditure of the Province as a whole.

186. The estimate given in paragraph 170 shows that very nearly 60 per cent.* of the population is engaged in agriculture, and I propose first to deal with their condition.

Size of agricultural holdings.

The number of holdings, as recorded in the Settlement papers, is as follows:—

District.	Number.	Area in acres.	Average area of a holding.
Cuttack	650,600	822,500	1.26
Puri	204,400	873,300	1.82
Balasore	376,600	692,600	1.80
Total	1,231,600	1,888,400	1.53

Sometimes, however, it occurs that one man holds land in more than one village, and enquiries made in 25 agricultural villages† show that out of 100 heads of families, 56 hold over 2 acres each, 30 hold 2 acres or less, and 14 have only homesteads.

The last are, for the most part, labourers; the 30 are artisans, weavers, and others who combine agriculture with their proper pursuits. It is all a question of degree, but the figures bear out the estimate above given that about 60 per cent. depend chiefly on agriculture.

* 57 per cent. was the recent estimate of the Secretary of State for the whole of India.

† Five groups in five Thanas of Cuttack.

The average holding of the agriculturist works out to 3·23 acres, and of the whole population to 2·21 acres per head of a family.

These villages were selected with care, and much trouble was taken in compiling the figures, but I fear they are still below the mark*.

Taking the number of persons in each family at five and the cultivated area of the Province at 4,930 square miles (viz., Cuttack 2,200, Balasore 1,460, Puri 1,270), the average area of cultivated land per family is a little over 3½ acres per family, which would give about 5 acres to the agriculturists.

187. Let us, however, see what is the condition of the Uriya, supposing him to hold 3 acres of rice land and quarter of an acre of homestead. Taking the land to be unirrigated and all to grow *sarad* rice, the outturn would be, according to my estimate 57·2 maunds of paddy, besides straw about 75 maunds. Setting aside 3 maunds of paddy for seed, the cultivator will get 33 maunds 35 seers of clean rice.

His family will consist of himself, his wife, one grown up and two small children, requiring altogether four adults' rations or 40 *chataks* of rice a day. They will, therefore, eat in the year at least 22½ maunds, leaving only 11 maunds 5 seers for all expenditure. He will, in his own compound, grow all the vegetables he uses, and with the straw and chaff can keep a pair of bullocks. He can do all his own ploughing, but will require some help, for which, and his other expenses, the following estimate has been made by Babu J. M. Das, an officer intimately acquainted with Uriya peasant life†:—

	Rs.	A.
1. For weeding, 30 labourers besides himself, at one anna six pies each.	2	13
2. For reaping, binding, and carrying to the threshing floor, 24 paid labourers at two annas each besides himself and <i>badli</i> labourers or labourers working in exchange for his own labour.	3	0
3. Rent	10	2
4. Carpenters and blacksmiths for repairing agricultural implements (18 seers of rice).	1	2
5. Chaukidar (8 seers of rice at 2 <i>gaunis</i> of paddy per acre).	0	8
6. Washerman and barber	1	0
7. Salt and oil	5	0
8. Spices, betelnut, tobacco, etc.	2	0
9. Fish, <i>dal</i> (pulses) and other petty expenses	3	0
10. Cloth	7	0
Total	35	9

The value of the rice left over after feeding the family is only Rs. 24-6, so there is a deficit of Rs. 11-3, equal to another 5 maunds of rice. If the land were wholly irrigated, there would be an additional margin of 4½ maunds, so that the expenses and receipts would nearly balance, and we may, I think, take it that quarter of an acre of homestead with 3 acres of irrigated, or 3½ of unirrigated land would just support the ordinary agricultural family of five on a subsistence allowance of food‡. Expenses such as marriages and a bad season would have to be met from other sources such as the son's earnings as a labourer, and in a bad season the raiyat would inevitably become indebted to the *mahajan*, and would in all probability never again be clear of debt.

188. In his report on Balasore§ Mr. Kingsford has arrived at somewhat different conclusions to those given in the preceding paragraphs. Starting with an estimated outturn of 14 maunds¶ of paddy to the acre, he finds that after paying their rents, the cultivating classes have left 8,198,300 maunds which, divided over 143,535

* Similar figures compiled in Balasore gave an average of 3½ acres per tenant.

† Mr. Nathan in his note on Kotdesh puts the cost per acre at from Rs. 7 to Rs. 9, including, however, the value of the man's own labour and that of his cattle. Mr. N. N. Banerjee puts the cost at Rs. 9-9 for broadcast and Rs. 10 for transplanted rice (excluding rent and seed).

‡ See Mr. N. N. Banerjee's report, page 37. He makes out that even with 10 *mauns* of land a raiyat has to meet an annual deficit of Rs. 17, but this cannot be correct—with 10 *mauns* a man is well off.

§ Report on Settlement of Balasore, Part V.

¶ That is, on the whole cultivated area.

families, gives an average to each of 57 maunds, the whole of which will be required for food, according to the following estimate* :—

"If the family consists of three adults and two children, one of whom is an infant, the following will be the details of their consumption of rice annually :—

- "(1) Rice for four persons at 10 *chataks* per head daily amounts to 2½ seers per day, 75 seers per month, and 22½ maunds per annum.
- "(2) The infant will consume cakes of rice flour to the amount of 2 seers a month and 24 seers per annum.
- "(3) *Arua*, or rice husked and unboiled, will be required for festivals at 5 seers per month, or 60 seers per annum.
- "(4) *Khas*, fried rice, sometimes seasoned with sugar. The monthly consumption will be 2 seers and the annual 24.
- "(5) Rice for making gifts, also 24 seers annually.

"The total annual consumption of rice is, therefore, 25 maunds and 32 seers, which, at the conversion of 22 of paddy to 10 of rice, amounts to 57 maunds. As the paddy is husked by the women of the family, the yield of rice is likely, in fact, to be somewhat greater, and may leave a balance of a few maunds, of which two will be disposed of as the perquisites of the village washerman, barber, carpenter, blacksmith, and *chaukidar*."

The total expenses of the family Mr. Kingford estimates as follows :—

"For a family of five, three adults and two children, in ordinary circumstances, the annual expenditure of which particulars have not already been given, may be thus stated :—

				Rs. A. P.
"(a) Living—				
Paddy to be husked by the women of the family, 57 maunds	...	...	Nil.	
Dal from his own bari, or obtained in exchange for some of the rice which would otherwise be consumed	...	...	Nil.	
Condiments, etc., at Rs. 2-2 per month	...	25	8	0
"(b) Thatching—				
Straw from his own field	...	...	Nil.	
Labour, his own	...	...	Nil.	
Bamboos and twine	...	0	10	0
"(c) Clothing	...	9	1	0
"(d) Miscellaneous—	...	1	14	9
Barber, washerman and chaukidar—one maund of paddy	...	...	Nil.	
"(e) Comforts and luxury—				
* Ornaments, average for the year	...	1	5	0
Utensils	...	0	8	0
Stimulants	...	2	8	0
	Total	...	41	6 0
(f) Agricultural—				
Rent, already deducted from the produce	...	...	Nil.	
Abwabs	...	2	8	0
Seed grain, 32 seers per acre	...	2	12	0
Manure, not purchased	...	...	Nil.	
Labour, his own or that which others supply him in return for his own	...	...	Nil.	
	Total	...	46	10 0
Repairs of implements—1 maund of paddy to the carpenter and smith	...	...	Nil.	
	Total	...	46	10 0

The deficit of Rs. 46-10 Mr. Kingsford proposes to meet by assuming one of the children to earn two annas a day by labour or Rs. 34 per annum, and other members of the family a few rupees by odd jobs, which, with sale of garden produce, may make up an income of Rs. 40 to Rs. 50.

* Balasore report, paragraph 199.

† Balasore report, paragraph 200.

I doubt whether the equation is correctly worked out, but the estimate may be taken as a very fair picture of the expenses of a family depending partly on agriculture, say three acres, and having some additional means of sustenance such as remittances by a grown-up son gone into service, or a profession such as that of a potter.

The large item for condiments and spices must, however, be reduced by the produce of the homestead; the payments to village servants are rather too large for a small holding, and in Cuttack the large payments for "*abwabs*" and stimulants could be considerably reduced.

The most interesting point of the estimate is that no allowance is made for expenses of cultivation, the whole being put down as the labour of the family, while in most estimates we find large payments for labour. As the number of labourers is less than a quarter that of the cultivators, and many of the former are tillers of zamindars' *nijchas* or employed by Brahmans and Karans, it is clear that the small cultivator cannot employ much outside labour, and for such as he does he pays in the form of his own labour.

The conclusion I come to is that if he has less than 3 acres of average land, a man must earn something by labour or by cultivating a few *guns** of sugarcane or other valuable crop.

With 3 to 4 acres of land a man can live and support a family in an ordinary year, but with no margin for luxuries or comforts; with 5 acres or more he is fairly well off.

In the Government estate of Khurda I found 4 acres to be the average area of the cultivator's *jote* (see paragraph 50 of my covering report).

189. If we except well-to-do raiyats holding themselves 8 or 10 acres or more of land, there are very few cultivators not in debt to the *mahajan*. Enquiries made by the

Assistant Settlement Officers have not resulted in much definite information, but it appears to be well established that the petty cultivator pays away as rent and interest the whole of his crop, except what is left to him for subsistence allowance, and has almost always to borrow again before the next harvest is ripe. In a good year he will pay his debts and rent in full in January or February and have enough to carry him on throughout the year if he has no unusual charges to meet, but he will probably seize the opportunity to marry off a son or daughter which may leave him in debt to the extent of Rs. 50 for which he will probably execute a mortgage on his land or a portion of it.

In bad years payment of rent and loans will not leave the cultivator enough to eat, and he will probably borrow again in June or July enough to carry him on to the end of the year. Most of the money, or rather grain, lending in Orissa is in the hands of zamindars or proprietary tenure holders, and they are by no means hard creditors. Very occasionally a bad tenant gets sold up, but as a rule the zamindar knows that it is to his interest to keep his raiyat going, and will supply him on the usual terms with the necessary grain, even though there be a large accumulated debt. As security he nearly always requires a bond (*tamsuk*, pledging the land, but these are not often used, and sometimes even particulars of the land and of the consideration are not filled in.

The only matter in which I have known raiyats to show any providence is that of preserving grain for seed, and several instances were brought to my notice in 1897 where the cultivator, though reduced to great straits for food, getting practically no rice to eat, refused to touch his little seed-store.

190. Agricultural loans† are most commonly made in the form of grain or of cash to be repaid in grain.

Sometimes raiyats lend grain to one another, but more often they apply to their *mahajan*, who is as a rule their zamindar. The commonest of all loans is one of grain for food and seed advanced in May and June or July or later, and repayable in kind in the following December. These loans are generally known as *sakai*, implying that one-fourth more than the amount lent is to be repaid, or as *panchpai*, which has the same meaning. Often, however, a yet higher interest is taken by *mahajans*; half as much again as was borrowed (*derdhi*), or even twice as much (*dwigun*) have to be repaid at harvest time.

* 36 *guns* = 1 *ma*, see paragraph 124.

† See Mr. N. N. Banerjee's *Agriculture of the district of Cuttack*, page 38.

191. The raiyat requires very often to borrow money in order to meet the *kist* of rent due in November before the winter rice is ripe. This he must obtain from a *mahajan* on the "*Karha*" system, i.e., he will in February repay the loan in grain at the market rate then current, with two *gaunis* (about 8 seers or 20 per cent.) as interest. Opinions differ very much as to the extent to which such borrowing is resorted. Mr. Nathan, whose intimate acquaintance with the Kotdes estate is unrivalled, reported* that in Puri the raiyat does not pay his rent through the agency of the *mahajan*, while Babu Jamini Mohan Das in Jajpur stated that the great majority of raiyats have to borrow for paying the *kist* that falls due in November.

I take it that much depends on the season and much also on the punctuality with which the zamindar realises his rents; some allowance also must be made for the nature of the country, and in Puri and south Cuttack a comparatively larger area is under *biāli* rice and *mandia* than in northern Cuttack and Balasore.

Ordinary money loans (*karja*) are made at a monthly interest of half an anna per rupee per month. Sometimes an anna per rupee is charged or even more, and if the sum be large and the security good, the rates may be as low as 12 per cent. per annum.

If the sum is not very petty, repayment is secured by a bond with or without a surety. Loans on simple mortgage (*rahn bandhak*) usually bear interest at 6 pies per rupee per month. In the case of a usufructuary mortgage (*dakhal bandhak*) no interest is charged, but the *mahajan* obtains possession until such time as the debt is repaid.

192. In spite of their indebtedness, and of the liability of the crops to injury by extremes of drought and flood, it is still the case as it was thirty years ago that in times of real scarcity the agricultural classes have more resources than any other, and I can quote as true of Orissa at this day the words of the Commissioners who visited the Province in 1867†:—

"Still more remarkable than in the North-Western Provinces (as noticed in such striking terms by Colonel Smith) was the advantage possessed by all the classes having any sort of rights in the land. In this instance, not only they had better means and better credit than the labouring classes, but being to a considerable extent in the habit of keeping grain for home consumption, those who had crops of some kind were better provided than the non-agricultural classes when grain was not to be bought."

Indeed, land is yet more valuable now than it was then, owing to the greater freedom of transfer. A revenue-free property fetches Rs. 100 to Rs. 150 an acre, and tenant-right with fixity of rent Rs. 40 to Rs. 80 per acre.

Condition‡ of non-agricultural classes or classes who depend for their subsistence either wholly or chiefly on means other than agriculture.

193. These may be divided into—

- (1) Artisan or skilled labourers.
- (2) Unskilled labourers.
- (3) Others.

The wages given to classes (1) and (2) by the Public Works Department during the thirty years 1869-99 may be taken as fairly representative of the prices of such labour. A carpenter or a blacksmith now gets from 7 to 8 annas per diem, an ordinary male day-labourer gets from 2½ to 3 annas, a woman gets 2 annas, and a boy gets from 1½ to 2 annas per diem. In the last few years there has been a decided rise in the earnings of these classes owing to the great demand for labour on the Bengal-Nagpur Railway. These are wages which a labourer can get away from his home. In his own native village a skilled labourer gets from 4 to 6 annas and an adult unskilled labourer from 1½ to 2 annas per diem according to the demand for labour. For making and

* Mr. Nathan to Settlement Officer, No. 238, dated 24th February 1913.

† Report on Famine of 1866, paragraph 77.

‡ This is taken from a note by Babu Jamini Mohan Das, Deputy Collector and Assistant Settlement Officer.

repairing agricultural implements carpenters and blacksmiths are always paid in kind, the annual payment averaging about 9 seers of rice from each client. When paid in kind, the day labourer gets varying quantities of paddy equivalent to 2 to 2½ seers of rice. There are two other classes of unskilled labourers—(1) the *kuthia* or *halia*, who is engaged by the year and paid daily in kind, and (2) the *chakria*, who is also engaged by the year but paid in cash. The following table shows the wages ordinarily given to these two classes of labourers:—

Name of Sub-Division.	<i>Kuthia or Halia.</i>						<i>Chakria.</i>	
	Rice given daily (paddy converted into rice).		Loans without interest.	Cloth.		Other allowances, if any.	Annual cash wages with food.	Cloth.
	Quantity.	Value.		Number and description.	Value.			
1	2	3	4	5	6	7	8	9
1. Cuttack ...	R. cu. 1 12	A. r. 1 8	Rs. 3 to 5	<i>Gamcha</i> ...	As. ...	50 acre of land as <i>jagir</i> and 65 seers of paddy at the end of the year besides the daily wages.	Rs. 12 to 15	2 pieces of <i>dhoti</i> ... 1 8 1 <i>gamcha</i> ... 0 6 1 winter cloth ... 1 0 Total ... 2 14
2. Jajpur ...	1 5 to 1 10	1 3 to 1 7	Rs. 1 and 40 seers of paddy	1	5	50 of an acre of land as <i>jagir</i> and 40 seers of paddy at the end of the year besides daily wages.	12 to 18	2 pieces of cloth ... 1 4 2 <i>gamchas</i> ... 0 7 1 winter sheet ... 0 14 Total ... 2 9
3. Kendrapara	2 0	1 10	3 to 5	...	...	40 of an acre of land as <i>jagir</i> .	9 to 18	2 pieces of cloth ... 1 6 2 <i>gamchas</i> ... 0 10 1 winter cloth ... 1 0 Total ... 3 0
4. Puri ...	2 0	1 10	15 to 20	...	...	50 of an acre as <i>jagir</i> land.	18 18 to 24	2 pieces of cloth ... 1 8 2 <i>gamchas</i> ... 0 12 1 winter cloth ... 1 0 Total ... 3 4
5. Khurda ...	2 0	1 10	15 to 20	...	...	
6. Balasore ...	1 10	1 7	5 to 10	1	5	50 acres of land as <i>jagir</i> .	18 to 24	Ditto.
7. Bhadrak ...	1 10	1 7	5 to 10	1	5	Ditto	12 to 18	2 pieces of cloth ... 1 4 2 <i>gamchas</i> ... 0 7 1 winter sheet ... 0 14 Total ... 2 9

An artisan with a family of five earning seven annas a day does not spend more than five annas a day, and he is thus able to lay by something which enables him in time to invest his savings in land, the great ambition of every man in Orissa. There is hardly any really skilled artisan who has not, if he is a man of the mufasal, some land and if a man of the town, some money-lending. I do not here include the village artisans who, never going out of the village, form part of the village organisation and are indirectly supported by agriculture. The most helpless class among the artisans are the weavers, who, living from hand to mouth with a scanty income, and having little or no connection with cultivation, seriously suffer in famine.

The lot of the day-labourers is rather hard in Orissa, as it is in many other parts of India. Spending what he earns from day to day, he has very little to pawn or sell in times of distress, and is therefore the first to succumb, unless constantly watched and provided with work within his easy reach. No labourer cares to go to a distant work leaving his family uncared for with the prospect of only earning enough for himself. Unlike the Behari, the Uriya never moves with his family, and this peculiar characteristic of the Uriya people should be never forgotten.

The *kuthia* or *halia* is a little better off than the day-labourer in that he has a better man to look after him, who, if an old master, does not forsake him until he is himself reduced to the very last strait. In paragraph 23, Part III, of their Report, the Famine Commissioners wrote:—

"Sir H. Strachey puts it thus, in the evidence from which we have already quoted: 'During a great famine, dependence, slavery and captivity are for the poor highly available,' and without going quite so far, we may say that the evolution of a body of some in some sense independent labourers for wages, increases the difficulty of abnormal seasons. We doubt if English labourers could as well resist a season in which food should be two or three times its ordinary price as do the people of India."

The third class comprises beggars and men employed in services and professions of all kinds. Orissa is noted for its *quasi* public charities; charitable endowments covering immense areas are scattered all over the Province, but unstinted private charity as it exists in Bengal is unknown here.

The beggars ordinarily met with belong to three castes—(1) Brahman, (2) *Jogi* and (3) *Kela*. Their number is very small, probably about $\frac{1}{4}$ per cent. of the total population.

Most of the professional men, combining agriculture with their professional incomes, are fairly prosperous.

Roughly, the proportions of the various classes who live wholly or chiefly by means other than agriculture may be put down as follows:—

					Per cent.
1. Beggar	...	...	...	...	5
2. <i>Kuthias</i> or <i>halias</i>	...	...	...	...	2.5
3. <i>Mulias</i>	...	...	...	...	5
4. Artisans, servants, and professionals	..	...	...	...	30
Total	...	...	...	...	44*

194. In page 171, Volume II, of his History of Orissa, Sir W. W. Hunter lays down this proposition: "All wages that are

Rise of wages and prices.

paid in money have risen by more than one-third (during twenty years); all wages that are paid in kind remain the same."

Measured by the quantity of grain which is given, it is quite true to say that there has been no increase in wages in kind during the last twenty years; nay, during the last forty years: but a little calculation will show that their money valuation has increased by 90 per cent. during the last thirty years.

It is mentioned on page 93 of Mr. Toynbee's History of Orissa that in 1814 a day labourer could earn two annas per diem in town when he can now earn three annas per diem, being an increase of 50 per cent. Supposing there has been no increase in the rate of wages in kind, the following table compares the rise in the value of the two kinds of wages:—

YEAR.	WAGES IN KIND.			PERCENTAGE OF INCREASE	
	Money wages.	Quantity of rice.	Money value.	Money wages.	Wages in kind.
	A. P.	Srs.	A. P.		
1814	...	2 0	2 to 2½	{ 0 10 to 1 0	
1898	...	3 0	2 to 2½	{ 1 10 to 2 3	50 125

Note.—The money wages given in this table are town wages. In villages the wages have risen in the same proportion, and are now slightly less in value than wages in kind.

As money wages have not risen in the same proportion as the prices of the staple food-crops, the condition of the town labourers has deteriorated, while that of the village labourer who receives his wages in kind has distinctly improved.

*This leaves a residue of 56 per cent. of the population dependant upon agriculture. In a previous paragraph the estimate was 60 per cent. The difference is due to the fact that some of the agricultural castes depend in a considerable measure on service for their support.

Wages in money are now slightly less in value than wages in kind, and the latter are therefore always preferred by the village labourers. In a conservative country like Orissa custom takes a long time to change, and money wages may, therefore, lag behind wages in kind for some time to come.

It is extremely difficult to get a coolie in the mufasal for cash wages in the sowing and reaping seasons, when wages in kind are freely given.

The rise in prices has also directly benefited the cultivating raiyats who pay their rents in cash. The diagram facing paragraph 164 shows the fluctuations in prices of common rice from the date of the last Settlement to the present time.

It appears that a severe flood in 1836 and a severe drought in 1840 caused prices to rise very high in 1837 and 1840. Omitting those two exceptional years, the average of eight out of ten years following the last settlement comes to 48·14 against 18·23 during the ten years 1887—96 before expiry of the settlement, giving an increase of 163 per cent.: very nearly the same results are obtained, if instead of ten years averages are taken for fifteen years, including the high prices during both the periods.

Competitive or *pahi* rents have, during the same period, risen by 44 per cent., or 119 per cent. less than the rise in prices which, after a deduction of one-third on account of increase in the cost of cultivation, still leaves a difference of 64 per cent. in favour of the cultivator.

195. So far the condition of Orissa in an average year only has been considered, but the most difficult problem that the administration has to face is the liability of the Province to loss of crops from natural calamities.

Famines.

The rainfall in Orissa is in most years ample for its needs, the average being 62 inches per annum;* but it is precarious, and its early cessation is fatal to the rice crop. On the other hand, the channels of the numerous rivers are insufficient to carry off the great volume of water that comes down after heavy rain from the table lands of Chota-Nagpur and the Central Provinces, and the waters overflow the banks and inundate the whole country, causing more or less injury to the standing crop. Less frequent but even more serious damage has been done by storm waves on the sea face, and though the low lands are to some extent embanked against the salt water, violent cyclones have breached the embankments and caused great loss to life and property.

It is sometimes said that the effect of these natural calamities has been aggravated by the attempts made to restrict the rivers within their channels by means of embankments, but a retrospect of the early history of the Province will, I think, show this view to be erroneous.

Historical records† show that great famines occurred in the fourteenth, fifteenth, and sixteenth centuries of our era, in the reigns of Raja Kabil Indra Deo, Raja Rai Uriya, and Raja Postub Madra Deo. The great Bengal Famine of 1770 was grievously felt in Orissa, and a few years later in 1774-75 another serious scarcity is said to have occurred. Again in the *Amli* year 1200 corresponding to 1792-93 A.D., in the time of the Mahrattas, the last great famine of the 18th century devastated the Province.

In the famine of 1769-70 Stirling says that "rice was not to be had for two seers per rupee. In 1183 (1775 A.D.) rice was hardly to be purchased in the bazaar of Cuttack at ten *pans* the *Katti seer*," or 10 annas for a seer of 105 tolas. He adds that a remission of 7 lakhs of revenue was given in that year. In Mr. Toynbee's history we find that during 1803 and 1804 there was scarcity in Cuttack but not in Balasore. In 1806 there was "total failure of the rains between 17th September and 18th November."

In July 1807 there were heavy floods followed by scarcity, and 1809, 1817 and 1828 were years of bad crops and great distress.

The most serious calamity of the first half of the century was the inundation of the sea on the Balasore coast in the years 1831-32. By this a large tract of country was temporarily thrown out of cultivation and almost depopulated, and the whole agricultural system of the district greatly disorganised. In 1834-35 the country was laid waste by inundation and in 1836, 1837 and

* See paragraph 107.

† Paragraph 61 of Report of Commissioners on the famine of 1836.

in 1842 Orissa suffered severely from drought; but the only general famine of this century comparable with that of 1770 is that of 1865-66.

Like all the greatest famines of Indian history it was due to drought, though the effect of this was aggravated by that of floods in August in the following year. More than half of the rice crop was lost, and prices rose to 5 seers to the rupee in June, 1866, and were much higher in some tracts on the Dhamra. The mortality was estimated by the Lieutenant-Governor at one-fifth, and by the Famine Commissioners at one-fourth of the whole population; and even if these estimates be somewhat high (see also paragraph 198), they are near enough to show what frightful suffering such a failure of the harvest entailed. In 1877-78 there was a famine in the neighbouring province of Madras and a partial failure of the rains in Orissa in the same year, with the result that prices rose rapidly and there was a good deal of local distress but nothing of the nature of real famine.

Again there was failure of the October rain in 1888 and 1891, followed in the latter year by heavy floods which caused a considerable loss of crops, and there being at the same time scarcity in parts of Bengal and Behar prices rose to above 14 seers.

In 1896 there occurred in all the principal rivers a flood of great height and unprecedented duration followed by short rain in September and an almost complete failure in October. Similar causes led to scarcity and famine throughout India, and at one time there was some fear lest we might find ourselves in Orissa face to face with such an insufficiency of food stocks as there had been in 1866.

The outturn of rice was estimated at 7 to 8 annas of a normal crop and the deficit to be supplied by import was put at 10 lakhs of maunds in Cuttack alone, allowing for the stocks in hand and the outturn of *rabi* crops.* In the event, however, though there was considerable local distress, very little relief was found necessary in Balasore beyond such as was afforded by the facilities for obtaining earthwork on the railway; in Cuttack the grants by the District Board were supplemented by contributions from the Indian Famine Relief fund. In Puri in the neighbourhood of the Chilka Lake distress was more serious, but on the whole the people proved capable of supporting themselves.

196. The difference between the two years 1865-66 and 1896-97 is very striking, and seems to show a great improvement in the resources and communications of the country. The years preceding the famine of 1866 had been a most prosperous era, distinguished by a great development of the exports,* and the terrible distress that followed the drought of 1865 seemed to disprove the truth of the popular belief that the food stocks left after a good year are sufficient to meet the wants caused by a single harvest's failure†. The years 1890-95 were marked by failure of rain and floods in 1891-92 and heavy exports in subsequent years which might have been expected to deplete the stocks in reserve, yet not only did the Province escape famine but it exported some 30 lakhs of maunds of grain in 1896-97 and 26 lakhs in 1897-98. The following† statement compares in a tabular form the two years:—

YEAR.	RAINFALL.			Estimated outturn of harvest.	Average price of clean rice.	Highest price of clean rice.
	Septem-ber.	Octo-ber.	Total for the year.			
1865-66	...	5.20 Nil.	30.30	‡	9.86	3
1896-97	...	6.83 .31	53.13	‡	11.87	9

Seers.

In 1863-64 the exports from Orissa amounted to 5½ lakhs of maunds; in 1864-65 to 9½ lakhs. In 1865-66 they fell to 62,000 maunds, and in the following year were practically nil, while from May to November 1866, 2½ lakhs of maunds were imported. On the other hand, in 1896-97 exports reached their highest limit of 30 lakhs of maunds, and in the following year again there were large exports.

* Commissioner to Government, No. 5R. of 5th January 1867.

† Report of Commissioners on Orissa famines, paragraph 8, Part II. There was however a poor crop in 1861-65, especially in Puri.

197. It is difficult to account for this great difference. An interesting estimate was prepared by the Collector of Cuttack of the produce and food-stocks of the district for the

Food Reserves.

years 1890—96*. He assumed the average produce at 120 lakhs of maunds of rice, which is a fairly high estimate—see paragraph 178 above—and that of other grains at $8\frac{1}{2}$ lakhs of maunds, plus $1\frac{1}{4}$ lakhs imported. The annual requirements are taken at 124 lakhs of maunds for food, plus 16 lakhs of maunds for grain; total 140 lakhs of maunds, or, deducting other grains, 131 lakhs of maunds of rice.

The exports averaged 11 lakhs of maunds, making an average annual deficit of 22 lakhs of maunds, for six of which the Collector accounts by imports from the Tributary Mahals, Balasore, and Khurda.

After examining the liability to error, the Collector found the old stocks available for sale or export to be $10\frac{1}{4}$ lakhs of maunds and the outturn of the year, $68\frac{1}{4}$ lakhs of maunds, making a total of 79 lakhs of maunds, against requirements of 131 lakhs.

It is obvious that this was not the actual state of affairs, and I do not think the outturn of winter and autumn rice can have been underestimated. The *sabi* crop was, however, exceptionally good, and we may add on this account another 15 lakhs of maunds instead of $8\frac{1}{2}$ mentioned by the Collector, and perhaps 5 lakhs of maunds for *dalia* (spring rice), raising supplies to 100 lakhs of maunds. Taking the consumption at 100 lakhs of maunds for food, or under half a seer a head per diem, and adding 10 lakhs of maunds for seed, we get a minimum deficit of 10 lakhs.

The exports were certainly greater than imports from the Tributary Mahals or elsewhere, and the stocks cannot have been less than 20 lakhs of maunds at the lowest figure.

I think the error lay in underrating the stores of grain held by large raiyats and petty *lakhirajdars*. It is certainly a fact that the grain trade is in the hands of the big dealers who have agents all over the country, but officers of experience, such as Mr. Nathan, have denied that the well-to-do raiyats hypothecate their produce to grain-dealers to any great extent, and state that they take their own surplus produce to the nearest market to sell. Certainly this is the case with the petty zamindars and *lakhirajdars* and all classes who are in the habit of letting out land on produce rents; and not only do they sell the crop directly, but they are capable of holding it up in expectation of good prices. I have heard of cases where considerable stocks were found in a secret chamber of an ordinary raiyat's house, and the *Mohants* of the charitable institutions in particular are supposed to keep very large reserves.

198. It is difficult to reconcile the various estimates of the population in the early years of the century. In 1821 we learn

Growth of population.

from Mr. Stirling that the total population of the Province was 1,300,000 and that there were but 3 towns of any size,—Cuttack, Balasore and Puri,—with populations of 40,000, 10,000 and 30,000, respectively. During the settlement operations of 1840—45 an estimate was made of 2,500,000. It is hardly conceivable that there should have been an increase of 1,200,000 in twenty years, and I think Mr. Stirling's estimate must have been below the mark; the other is probably somewhat high, for in 1854 an estimate, based on the counting of houses†, gave a population of but a little over 2,400,000. Just before the famine the population was estimated—chiefly from data furnished by the police—at three millions, and after it in 1867 at 2,100,000‡. In 1872 the first regular census showed the population to be 3,035,000, so that if the estimates of 1867 were correct, the population had in four years increased by 935,000, or by more than 44 per cent. This is obviously impossible, especially in days when immigration was almost unknown and the locomotion was slow and difficult. I think that the outside increase in five years, allowing for the return of those who had fled to other districts, may be put down at 20 per cent, which would give the population of 1867 at about two-and-a-half millions and make the loss of life in 1865-66 only half a million, which is not improbable.

* Collector to Commissioner, No. 2880, dated 9th December 1896.

† See paragraph 36, Famine Commissioner's report of 1866, Part I.

‡ Commissioner to Board, No. 301, dated 24th July 1867.

The reliable figures as to population may be taken as—

1843	...	...	...	...	2,500,000
1865	...	...	...	...	3,000,000
1867	...	...	...	...	(a)2,500,000
1872	...	...	...	...	3,000,000
1881	...	...	...	...	3,600,000
1891	...	...	...	...	3,800,000
Present day	...	...	...	...	(a)4,200,000

(a) Estimate.

This steady increase is in itself the most valuable evidence of the prosperity of the Province under British administration. It cannot, however, be said to be an unmixed blessing. In rather more than half a century the population has increased by 1,700,000, or 68 per cent., and in the same time cultivation has increased by about a third, and there is not much room left for further extension. The amount of land and agricultural produce available for the support of each individual has thus been reduced in the ratio of 100 to 79. The population now averages about 700 per square mile cultivated in Balasore, about 570 to the square mile of cultivation in Puri, and nearly 800 to the square mile of cultivation in Cuttack; while in some Thanas the density is much greater. So far the increase in the value of the surplus produce has gone far towards recompensing the cultivator, and a general modicum of necessities has replaced the alternate want and abundance of former years. It is, however, certain that the limit has been nearly reached, and either the increase of population must be checked or the pressure relieved by emigration, or the standard of comfort reduced to a dangerously low level.

Part III.

CHAPTER IX.

A SHORT ACCOUNT OF ANCIENT ORISSA OR ODRADESA: ITS PLACE IN ANCIENT GEOGRAPHY, ITS HISTORY, PEOPLES, AND RELIGIONS.

An attempt is made in this introduction to bring together a short history of ancient Orissa. My excuse for quoting text rather than giving references is to save the time of those who have not ready to hand the works of the authorities quoted. I desire to express my deep sense of obligation to Mr. F. E. Pargiter, I.C.S., who has very kindly revised in part the draft of this chapter.

(A) *The place of Orissa in the geography of Ancient India.*

199. In the second book of the Mahabharata is given an account of the celebration of the *Rajasūya* sacrifice, which is said to have been attended by all the kings in India.

Sakas.

Amongst other kings (who brought gifts) were the King of the Sakas, identified as Scythians by Professor H. H. Wilson, and the Kings of Banga, Pundraka and Kalinga, identified by the same authority to be the inhabitants of Lower Bengal, Midnapore, and Ganjam.

200. Mr. F. E. Pargiter, I.C.S., in a paper on the Ancient countries in Eastern India (As. Soc. Vol. LXVI, Part I, No. 2), gives evidence to show that five kindred races inhabited East Bihar and Bengal, namely, the Angas, Vangas, Kalingas, Pundras, and Suhmas, their countries being known by the same names, and that the connection between those races was explained by an ancient legend that they were descended from five eponymous kings of the same names who were sons of the queen of Bali, who was king of the Eastern Regions. It appears that those races were at first considered barbarians by the kings of the North-West, but they become Aryanised; and the Angas, Kalingas, and Pundras were raised to the same degree of esteem which the nations of Madhya-desa [the North Western Provinces] enjoyed. He attributes their elevation to some marked change which passed over Northern India. The alteration was most marked in the estimation of the Kalingas.

201. *Kalinga*.—Mr. Pargiter quotes from the Raghu-Vamça that, after the conquest of the Vangas, Raghu conquered Kalinga. The route to Kalinga was pointed out by the kings of Utkala and it lay south of the Kapiça which he identifies with the Kansui or Cossye river in Midnapore, and which Lassen had identified with the Subarnarekha river. This passage is also quoted by Dr. Rajendralal Mitra (page 7), and would go to show that Utkala was a separate country from Kalinga. Mr. Pargiter finds that from the Kansai river southward a portion of Utkala intervened before Kalinga was reached. "The northern limit of Kalinga was approximately the Vaitarni, for the Mahabharata, describing the Pandavas' pilgrimage to all the *tirthas*, says:—After bathing at the junction of the Ganges and the sea, they travelled along the sea-coast towards the Kalingas and reached that people and the river Vaitarni at the same time. On its bank was Viraja-tirtha, the later Biraja-ksetra, the modern Jajpur. Kalinga therefore comprised modern Orissa about as far north as the modern town Bhadrak in the Balasore District and the sea-coast southward as far as Vizagapatam. Its limits inland are not clear. Lassen places Kalinga along the inner side of the Eastern Ghats from the Vizagapatam District south-westward as far as the Karnul District."

In support of the above we have the following from Professor Wilson's account of the travels of Hiouen Tshang:—

Kalinga, the name given by Sanskrit and classical writers and by the people of the Eastern Archipelago, to the upper part of the Coromandel Coast, usually including Orissa.

202. *Utkala and Odra*—*Odra or Udra*—After identifying Hughli, Howrah, Bankura, and Burdwan, together with the eastern portion of Midnapur

(including Tamruk), as Suhma and Tamalipta, Mr. Pargiter cannot agree with Lassen in making the territory of the Odras more or less coterminous with Orissa. The Utkalas occupied the north of the Balasore District and the south was Kalinga. "Hence, it seems impossible the Udras can have inhabited any portion of (what is now known as) Orissa."

"In the last century Orissa included the tract of country between the rivers Rupnarayan and Subarnarekha (see Bengal Administration Report, 1872-73, page 40)." So that the name has not always denoted what it simply means now. In this connection the titles of some of our early Regulations may be studied.

After discussing and suggesting the region occupied by Paundra, with which Udra was frequently associated, he says:—

These considerations give, I think, an indication where the Udra territory was in ancient times. The eastern part of Midnapore belonged to Tamalipta and Suhma, hence there remains only the western part of that district which no other nation appears to have occupied; and if to this be added the modern district of Manbhum, the eastern part of Singhbhum, and perhaps the southern portion of Bankura, a well-defined tract is obtained, which no other tribe appears to have owned and which bordered on Paundra. I would suggest that this must have been Udra in ancient times.

And in order to explain the present position of the Uriyas, he continues:

If this be a reasonable inference, it discloses how an insignificant early tribe developed and spread during the confusion which prevailed in the dark times of mediæval Indian history. I would suggest that the Udras must have pushed southward, overrun the whole of Orissa and Ganjam, and driven the Kalingas downward into the Vizagapatnam district, till their further course was checked by the Dravidian powers on the south; then they must have turned westward and forced their way round into the southern portion of Chhattisgarh.

Utkala.—The Utkalas were well known, though not mentioned often in the Mahabharata. They are linked with the Mekalas (Bhishma-p., ix 348; Drona-p. iv. 122; Ramay., Kisk.-k., xli. 14), and with the Mekalas and Kalingas (Karna-p., xxii. 882). The position of Kalinga has been explained. The Mekalas inhabited the Mekal hills in the west and north of Chhattisgarh. The Utkalas must therefore have occupied an intermediate position. From the passage quoted from the Raghu-Vamsha with reference to Kalinga, it appears the Utkala territory stretched nearly as far as the R. Kapila or Cora in Midnapore; that passage does not mean it reached that river, for it was only after he crossed that river that Raghu had occasion to accept the guidance of the Utkala kings. From these data and the positions assigned to Paundra and Odra, it may be inferred that Utkala comprised the hilly tracts from Balasore to Lohardaga and Surguja.

203. On this subject it would not be right to exclude the work of Dr. Rajendralal Mitra. He says:—

Odra is by far the most extensively used term for the Uriyas, and its vernacular form is Od or Ud. If this as a specific tribal designation be added to Kola, the generic name of the aborigines, we get Utkola, a Kola of the Ud. class the subsequent conversions of Ut. into Ut and Kola into Kala being the results of phonetic decay or vernacular corruption.

This is, I think, speculation; the latter part of the derivation may be right (Mr. Pargiter is inclined to concur in it), but the former part is doubtful. He observes that in Sanskrit *utkala* means a bird-catcher. We may, perhaps, ask whether this has any connection with the legend of the *owler*, see paragraph 229.

Babu J. M. Das, an Assistant Settlement Officer, possessing great knowledge of Orissa, has doubts whether, although different kings ruled Kalinga and Utkala, the peoples ever differed in race, dialect, religion or customs.

It seems very likely that the two kingdoms were welded into one during the reign of the Yabanas who were ultimately driven out by Yayati Kesari. Yayati restored the image of Jagannath to the temple of Puri and his political capital was at Jajpur, his sway thus extending over the whole of modern Orissa.

204. To sum up, if we accept the evidence and suggestions set forth above, the area which forms the subject of this report, i.e., the temporarily-settled area of the three districts, consisted in ancient time of portions of—

(a) *Kalinga*, from Chilka Lake to the Baitarni river, i.e., Puri and Cuttack.

(b) *Utkala*, from the Baitarni river to the Subarnarekha river, i.e., Balasore.

- (c) *Suhma* and *Odra*, from the Subarnarekha to the northern limit of Balasore (and onward).

The areas known as Orissa from time to time have varied very greatly.

Before 500 A.D.—From the Hooghly to about Vizagapatam, known more or less as Kalinga.

474 A.D. to 1132 A.D.—From Soro (Kansbans river in Balasore) to Ganjam, and on the east and west from the sea to Dhenkanal.

1132 A.D.—As Orissa. Extended on the south to the Vizagapatam district, probably not less than 40,000 square miles.

1590 A.D.—See Stirling's Account of Orissa, Todar Muhl, and Man Singh's revenue-paying area, rather less than 14,000 square miles.

1803 A.D.—Modern Orissa. In 1828 A.D. the northern, central and southern divisions were made, and correspond nearly to the modern districts of Cuttack, Puri, and Balasore with part of Midnapore.

It may be added that Dr. Rajendralal Mitra quotes the *Ain-i-Akbari* to show that about two centuries ago Orissa consisted of "the five sircars or districts of Jelasir, Bhadrak, Cuttack, Kallendraput (Kalinga Dandiput) and Rajmahendri. The first, however, included Midnapore, Mahakami Ghat and Narainpur. The province of Orissa may therefore be said to have extended from Midnapore to Rajmahendri, the portion between the Chilka Lake and the Subarnarekha having been ceded to the Mahrattas in 1757."

(B) *The Soil—its formation.*

205. Roughly speaking the temporarily-settled area which forms the subject of this report amounts to 5,000 square miles (Cuttack 2,300, Balasore 1,700, Puri, excluding Khurda, 1,000).

It is not too daring to say that in pre-historic times the whole of this area was washed by the sea.

In the modern Orissa we still find a barrier of hills and forests on the west, "and a plain, level country extending from the foot of that barrier to the sea evidently of alluvial formation, the uniform surface of which is not disturbed by a single rocky elevation nor does a single stone occur between the beds of iron clay lying on the western frontier and the Ocean, if we except the curious spheroidal concretions of calcareous matter or limestone nodules which are found very generally dispersed (Stirling)." Sir William Hunter also gives us some very picturesque accounts of "land making." The process is still going on and may be observed in the shallowness of the Chilka Lake which once was a harbour for sea-going ships and is now rarely more than 6 feet deep. Two modern and interesting proofs may also be given—

- (1) The cave inscription which tells us of the sea-made origin of the caves, the sea being now 50 miles away.
- (2) The increase in area of certain estates on the sea-coast, especially in the Puri District, since the last survey of sixty years ago.

206. We have evidence that systematic cultivation probably did not begin in the tract under report till some 1,500 years ago, but that the earliest cultivation was probably in 800 B.C. We find in the Mahabharata that the tribute brought by the kings of Kalinga consisted of ivory and elephants, and Professor Wilson considers that the tributes brought by each Raja are typical of the trades in which their kingdoms engaged. Hiouen Tshang (629 to 645 A.D.) travelled from Jajpur to Khandagiri through thick forests. Even in the reports of the last settlement sixty years ago damage from wild animals is a frequent cause of low assessment. The cultivated area in the 5,000 square miles has increased from 2,600 square miles in 1837 to 3,400 square miles in 1899.

In the above remarks I only wish to imply that in earliest times the sea came close to the hills, and that cultivation in Orissa is comparatively modern.

A geological account of Orissa may be found both in Stirling and Hunter.

(C) History.

207. I do not attempt to give more than a few important dates and a brief account of the ancient peoples and their religions. Stirling and Hunter give us the early, and Mr. Toynbee the later, history.

* 208. *Important dates in the ancient history of Orissa.*—The earlier dates must of course be taken as approximate only.

800 B.C. (?)—The Kalinga dynasty.

477 B.C.—The receipt of the sacred tooth of Buddha by the King of Kalinga, i.e., the introduction of Buddhism. This date must, however, be reduced to a few years later, for the year of Buddha's death is now fixed at 477 B.C.

250 B.C.—The pillar at Dhauhi erected by King Asoka after the establishment of Buddhism.

473 A.D.—The expulsion of the Buddhists and the foundation of the line of Lion kings. The rise of Jajpur.

500 A.D.—The importation of 10,000 Brahmins from Oudh.

625 A.D.—The completion of the Bhubaneswar temple, i.e., establishment of the worship of Siva.

961 A.D.—The foundation of Cuttack town.

1133 A.D.—The Ganga Vansha dynasty.

1198 A.D.—The building of the present temple at Puri, i.e., the re-establishment of Vishnu. (Vishnu is said to have lived at Puri from the beginning of all time).

1203 A.D.—Afghan invasions into Bengal begin.

1252 A.D.—The completion of the Sun temple at Kanarak, dedicated to the Sun in honour of his cure of Samba, son of Krishna. (There is a temple at Lahore similarly dedicated, see *Travels of Hiouen Tsaing*, Part I., Vol. XVII, Royal As. Soc. Journal, but the cure of Samba is supposed to have occurred on the site of the Kanarak Temple in Orissa).

1471 A.D.—Alliance with Muhammadans.

1527 A.D.—The passing away of Chaitanya.

1556 A.D.—The invasion of Kalapahar.

1568 A.D.—The sacking of Cuttack and plunder of Puri by the Muhammadan Governors of Bengal.

1574 A.D.—Daud Khan becomes King of Orissa.

1576 A.D.—Death of Daud Khan.

1578 A.D. } —Todar Mull and Man Singh—Mogul supremacy—Khurda

1592 A.D. } dynasty—Survey of the Province.

1635 A.D.—English occupation of Pipli on the Subarnarekha.

1642 A.D.—English occupation of Balasore.

1742 A.D. } —Maharatta conquest.

1751 A.D. }

1803 A.D.—British conquest of Orissa.

209. *The ancient peoples of Orissa; their history.*—The history of the people is entirely bound up with that of their religion, and it is impossible to keep the two apart. The earliest legend of occupation is at Khandagiri, where sandstone rock is found. I believe that this stone is found in no other part of the temporarily-settled area except in Naraj and in the Government estate of Khurda. It is also found in Dompara and Atgarh (Tributary States). The legend says that Hanuman and his monkeys, when they were bringing stone from the Himalayas for Rama's bridge dropped some blocks in their flight. These blocks are the hills of Khandagiri and Udaigiri. Legends regarding giants and tanks and mounds built by giants may be found in many parts, e.g., Jajpur is the centre of the navel of Gaya Asur, the head being, I believe, at Gaya (Stirling). There is a fine tank built by giants 3 miles north of Bhadrak, and in Cuttack District we have a Pargana named Asureswar.

210. From the evidence of all the authorities, (Stirling, Macpherson, Briggs, and Hunter) we are able to say that effective Hindu occupation did not begin, speaking approximately, till 473 A.D.; we may therefore try to find out what tribes inhabited Orissa before the fifth century and whence they came. The word *effective* must be inserted in view of the legendary Aryan conquest and the foundation of the kingdom of Kalinga (Hunter, Vol. I, p. 188).

211. Mr. Pargiter, in his paper already referred to, dealing with the earliest period to which the Mahabharata relates, concludes by saying that—

Magadha, Videha, Vaigali, appear to have been the outposts of Aryan conquest and colonisation. Anga, Vanga, Kaingra, Paundra, and Sahma with Tamalika and

Odra were kindred nations, which were not of Aryan stock and were not subjugated by the Aryans, but passed under Aryan influence and became Aryanised. Utkala was a congeries of Kolarain tribes occupying the hilly tracts, where they are still found. The Utkalas, being so-called aboriginal tribes, must of course have come into this region first; and their position among the hills also suggests the same inference. They must have been driven into the hills by latter invaders.

Mr. Pargiter suggests that the Kalingas, Odras, etc., must have come from the Bay of Bengal, *i.e.*, that they came from the sea, settled on the sea-coast and gradually carved out kingdoms inland. "Lastly, came the invasion of the Aryans into Eastern India. Their conquering vigour seems to have spent itself by the time they subdued Videha and Magadha, for they had already passed through many generations in the plains of North India, and the enervating climate and easy conditions of life had surely, if slowly, modified the constitution which their ancestors had acquired in colder and harder climes."

212. General Briggs, F.R.S., in a paper read before the Royal Asiatic Society in May-June 1852, appears to have been

The Hindus.

among the first to notice the uniformity of habits of all the wild tribes of India. Amongst other points he desired to establish the fact that the Hindus entered India from a foreign country and found it pre-occupied by inhabitants whom they gradually reduced to serfdom; that they introduced the Sanskrit language and municipal institutions; that in every respect, both as regards race and language, the Hindus are different from the inhabitants they found in occupation, and that the latter have a common origin. These conclusions are well established at the present day.

He quotes Professor Wilson's opinion that the Hindus were a northern race and fair complexioned, and that at the time of Manu the Hindus had not passed the 22nd degree of north latitude, having probably been checked by the Satpura Range. The earliest monument of the Hindus in the Deccan is of 450 A.D., and it occupied the Hindus four to five hundred years to reach Mysore. About the same time the Hindus entered Orissa in effective numbers, *i.e.*, in 473 A.D., but kept to the plains, leaving in independence the inhabitants of the hills. In all cases of conquest the aborigines became serfs and outcast village watchmen. In this connection the quotations from Dr. Rajendralal Mitra, given in paragraph 217, may be read. He is of opinion that a mixed race professing forms of Aryan civilisation was already to be found in Orissa, and this is no doubt true, for Buddhism had prevailed many centuries there, and Buddhism ignored the rigid limits of caste.

Buddhism began in Bihar about five centuries before Christ and rapidly spread in all directions. It soon reached modern Orissa and was carried into Ceylon in less than a century after Buddha's death. The Buddhists thus entered Orissa from the north (see the end of paragraph 215).

In the following paragraphs I do not wish to set forth more than the results of General Briggs' observations. He does not tell us of the earliest institutions of the Hindus; he does not do more than point out the difference between them and the aboriginal tribes at the time they came in contact with each other. Other writers such as Maine and Phillips may be referred to for information regarding the early Hindu village communities. I quote one short sentence from Phillips (Tagore Law Lecture 1874-75) taken from Hunter, Vol. II:—

The Hindu village had a non-Aryan predecessor in Orissa in the Khand hamlet, but that wanted the corporate life of its successor and was merely a collection of families.

Possibly these remarks may apply to all early communities.

General Briggs shows us how the aboriginal tribes must have over run the country as hunters or herdsmen, and how they have now become slaves and watchmen where they have been conquered. He enumerates eleven points of difference between these tribes and Hindus, *e.g.*, caste, marriage of widows, eating of beef, drinking liquor, eating of ready-cooked food, spilling of blood, self-created priesthood, burying of dead, patriarchal instead of municipal institutions, trial by heads of tribes instead of by courts of equals, and illiterateness. He shows further differences in moral virtues and occupations, and even quotes Herodotus in support of the distinction between the pastoral, hunting, and fishing race of India and the race who dwell in cities. Among other aboriginal races are described those which inhabit the territory between the eastern mountains "and the sea coast, having the Chilka lake for its southern, and the port

of Pipili (on the Subarnarekha) for its northern boundary. This territory is occupied by the Saurahas, the Bandwaras and the Khonds." General Briggs agrees with Captain Macpherson (who made a special study of these tribes) and Stirling in saying that—

The Hindu race did not enter Uriadesa till about the year 473 A.D. nor did they attain the zenith of their power till the ninth century. They introduced their municipal form of government as elsewhere into the plains, but the aborigines remained unsubdued and continue so till this day.

He then quotes a very large number of authorities as to the similarity of features of all the aboriginal tribes, and concludes that their features are Scythian and quite distinct from the Caucasian type. As regards language, in the beginning of the century, Sir W. Jones and Mr. W. Colebrooke divided the languages of India into northern and southern, the former containing nine-tenths of words of Sanskrit origin, and the latter having a separate origin. Most especially marked is the difference between Sanskrit and Tamil. General Briggs finds that the aboriginal languages are so closely allied to the Tartaric dialects of Thibet and Bhutan that they must have a common origin, called Scythian by Professor Rask. In fact, he proves to his own satisfaction that "all the vernacular dialects of India owe their origin to Scythian tongues rather than to the Sanskrit of their conquerors." He concludes by endeavouring to trace the origin of the aboriginal tribes, and finds that the Assamese are Chinese, while the other tribes (including the ancient inhabitants of Orissa) are of the Thibetan branch, "probably northmen of the Scythic stem."

213. In order that I may not seem to have set forth at too great length

the account of the aboriginal tribes, I would call attention to the fact that, although we have now to deal with a temporarily-settled area of only 5,000 square miles, the area administered for revenue purposes by Raja Man Singh as lately as the end of the sixteenth century was 13,935 square miles. Deducting the area of the Khurda Government Estate (about 1,000 square miles) and the southern portion of the Midnapore and Singhbhum Districts, (about 1,000 square miles) some 7,000 square miles of the latter mediæval kingdom of Orissa was and is still occupied to a very large extent by aboriginal tribes. Even in the Government Estate of Khurda we find more distinct traces of aboriginal offices and institutions than in the other temporarily-settled areas under report (*cf.* Captain Macpherson's Article, Vol XVII, Part I., Bengal Asiatic Journal, and Lieutenant Frye's Article in the same volume with Mr. W. C. Taylor's Khurda Selections, and the paragraph on Khurda in Moffat Mills' Minute).

From the evidence which we have before us the aboriginal inhabitants of Orissa seem to have been the Savars and Khonds (or more properly Kandhs). The earliest known were the Kalingas of the Mahabharata, and in later days "the Suari of Pliny and the Subaræ of Ptolemy," both these words being no doubt variants of Savar. It is well known also that a close connection exists between these tribes and the Bhuiyas.

Epochs of the history of Orissa.

214. Hunter's Orissa, Vol. I, page 188, gives us an account of the next stage.

The ancient annals of Orissa divide themselves into three long chapters, one of which is wholly obliterated by time, and the other two are more or less effaced. The first begins with the legendary Aryan conquest, when one of the five sons of the northern sage lived forth from the Sanskrit pale and founded the kingdom of Kalinga, probably at least eight centuries before Christ. The second dates from the death of Buddha, 543 B.C. [477] and consists of Ceylonese legends of the sacred tooth, and a more or less mythical account of the first settlements of Buddhism in Orissa. The third opens with the publication of Asoka's edicts, about 250 B.C., and closes with the accession of the Long-haired or Lion Dynasty in A.D. 474.

The caves at Khandagiri and Udaigiri represent, says Hunter, ten centuries of human existence, in the course of which the ascetic character of Buddhism passed into the ceremonial phase, and ended in the fashionable phase. He complains that Indian literature tells us nothing about the cave dwellers of Orissa, but finds evidence from the sacred books of Ceylon to show that in 543 B.C. [477] the tooth of Buddha was received by the King of Kalinga. After this the next authentic date is 250 B.C., the date of the inscription on the Daauli Rock near Sardairpur on the Puri Road. Buddhism is by this time

securely established. The race which is supposed, according to the temple Palm Leaf Records, to have come to Orissa between 538 and 421 B.C. and to have conquered it, are incorrectly described as Yavanas (Hunter, pages 201 and 214). Hunter considers the Yavanas to have been Ionian Greeks, and dates their conquest of Orissa as between 306 and 57 B.C.

Antiochus is mentioned in the inscription at Dhauli, and Antiochus Theos was in fact at the height of his fame between 261 and 246 B.C. Hunter considers that Orissa received its Buddhism from the middle valley of the Ganges, and was under its influence till 473 A.D.

The passages in Hunter, Vol. I, pages 201 and 238 may well be read in this connection.

215. Most authorities seem to agree that all the nations who have conquered Orissa came from the north, and if they were not Yavanas the enterprise and desire for conquest was inspired by the Yavanas or foreigners. It seems that Yavana is a very indistinct term, and it appears to represent nothing more than the people whose tongue meant *ya-ba* to those with whom they came in contact, in exactly the same way as *barbarian* meant the people who talked in the language of bar-bar or gibberish. I may add that Hunter sometimes seems to feel doubts about the identity of the Yavanas with the Ionian Greeks, as the following passage shows:—

I hope that in my anxiety to tract the Greeks through India I have not been led to make the record more complete than the evidence will bear.

216. The general results of the information which we have, shows us that between 477 B.C. and 500 A.D. Orissa (*i.e.*, the plains of Orissa) was dominated by a people who professed the Buddhist religion, but do not resemble the Hindus of the present day in several important respects. Perhaps the most striking is the love of maritime enterprise, as shown in the port of Tanluk and in the harbour of the Chilka, and perhaps most of all in the colonisation of Java and Bali. There is no doubt that this colonisation did take place from Orissa. Bali, it may be noted, is the husband of the queen to whom the Rishi gave five sons, one of whom was Kalinga. We may add that the mode of payment of village officials and the village communities in Java are very similar to those of India (see Phillips' Tagore lectures and his quotation of M. de Laveleye). It is also to be remembered that many invaders from the sea came into the country during the early part of the Christian era, *e.g.*, we have a very graphic account of the invasion of Red Arm (now considered to be a Singhalese pirate) and others generally called Yavanas in the Palm Leaf Records of the Puri Temple.

217. From 473 A.D. Orissa came under Aryan and Brahmanical influence, *i.e.*, from the date of the first Lion King Yayati Kesari. Buddhism lost ground steadily, and in 657 A.D. the principal temple of Bhubaneswar was completed in honour of Siva. We know also that a body of Brahmans, whose numbers were said (probably with much exaggeration) to have been 10,000, were imported from Oudh (Kanauj) about 500 A.D. By such importations and invasions the plans of Orissa came finally and permanently under Aryan influence. The development of the political relations between the tribes and their conquerors is well described by Captain S. C. Macpherson in his paper on the Religion of the Khonds. He shows us that—

The Orissa form of policy may be broadly defined to have been a despotic monarchy limited by a military aristocracy, while theocratic influences predominated. The body of territorial nobles were highly elevated in respect of rank, power, and possessions. They all bore the title of Raja. From their exclusive relations with the unsubdued portions of the primitive races, enabling them to command their rude valour, they derived considerable power; and they mainly wielded the great distinctive institution of Orissa—its *Paks*, or hereditary landed militia, an army numbering from 150,000 to 300,000 foot soldiers.

The more important of the petty principalities are possessed by families which trace their descent from the royal houses of Orissa or from the principal stocks of Rajputana. A considerable number were originally planted by the Orissa sovereigns among the hill frontier of their State dominion, for its protection from the incursions of the dispossessed races. In some quarters portions of the ancient population, where still unsubdued, formed samindaries by inviting junior members of influential samindari houses to become their Rajas.

* See also Asiatic Society Journal, Vol. LXI, Part I, pages 58 and 59, "Græco-Roman influence on the civilization of India" by Mr. V. A. Smith.

Captain Macpherson goes on to show the positions which the aboriginal races occupied. In the State domain, they became serfs; in the partially cleared tracts they remained in a semi servile condition under the rules of "vettiah," or as it is now generally called *betia*, i.e., labour without hire. In the more inaccessible parts they were free tenants paying rent or giving service in lieu of rent—

Assimilation of Aborigines.

They have everywhere tended—and the process goes on daily by the most curious steps—to become assimilated to their conquerors in manners and religion; and the Khonds, in particular, have formed by intermixture with them new castes, many of which hold a respectable place within the pale of Hindu society.

Dr. Rajendralal Mitra speaks of the coming of Vratya or degraded Kshatriyas amongst the Uriyas at a very much earlier date. A new impulse to progress was given:

Two such markedly dissimilar forms of humanity as the ancient aboriginal Uriya and the Hindu could not abide together without causing a ferment; the strong must have told upon the weak, and it is to be presumed that thereupon, as in other parts of India, the history of Aryan civilisation repeated itself, driving the more obstinate and resolute from their homes to the shelter of hill-sides and forests and amalgamating, though partially, with the more docile and tractable, by admitting them into the pale of Hinduism as a servile race. The intercourse thus established led to extensive miscegenation, and the result was a mixed race who professed forms of Aryan religion tinged more or less with the ancient faith of the country.

Stirling also at great length describes the relations between the tribes and their conquerors. His picture of the feudal system is considered by Captain Macpherson to be somewhat overdrawn, but Stirling seems to have been the earliest writer on the subject, and his account of the three tracts, the Eastern and Western Rajwara and the central tract or Khalisch, may well be perused. A curious survival of the incidents which attached to the hill and coast zamindaries still remains in the right of primogeniture. This right is still recognised in several of the best families in the old Rajwara tract, and occasionally even in the present temporarily-settled area.

218. So far I have endeavoured to show that from a nation composed of rude aborigines the Uriya people were transformed and are being transformed into an Aryan community.

At the beginning of this section I have set forth what appear to be the most important dates in the history of Orissa, and from 500 A.D. onwards the actual history of the Province may be read in the works of Stirling, Hunter, and Toynbee. The fiscal divisions and revenue administration of the Hindus and of their conquerors will be found in a later portion of the report.

To very briefly recapitulate: The aboriginal peoples appear to have been of what is known vaguely as Scythic stock. At the time of the Mahabharata they constituted a kingdom and were known as Kulingas. The kings of the Lunar dynasty asserted a vague suzerainty over them, and they were under Aryan influences which were strengthened by the ascendancy of Buddhism. It was not till the end of the fifth century that they came under effective Hindu domination, and after conquest by the Muhammedans in the end of the 16th century, and by the Mahrattas in the middle of the eighteenth, they came under British rule in the beginning of the nineteenth century.

(D)—*The People of Ancient Orissa.*

219. I give below a table of castes in Orissa arranged according to their numerical importance. The figures are taken from the census returns of 1891.

Castes of Orissa.

Table of Castes in Orissa (1891) arranged according to their numerical importance.

I. Upwards of a lakh—

Khandaits ..	...	600,000
Brahmans ..	...	400,000
Chasas ..	...	430,000
Goalas ..	...	250,000
Pans ..	...	160,000
Kandras ..	...	135,000
Tanti ..	...	132,000
Karans ..	...	123,000
Keots ..	...	122,000
		<hr/> 2,352,000

II. Less than a lakh and more than half a lakh—

Barhis	...	...	87,000	
Bandharis	...	...	76,000	
Sudras (not defined)	...	...	75,000	
Dhobas	...	...	74,000	
Bauris	...	...	69,000	
			<hr/>	381,000
Mohammedans	...	...	...	75,000

III. Thirty-nine to fifty thousand—

Goalas	...	...	47,000	
Savars	...	...	44,000	
Kumhars	...	...	42,000	
Barhis	...	...	41,000	
Rajus	...	...	41,000	
Banias	...	...	40,000	
Gokhas	...	...	39,000	
			<hr/>	294,000

IV. More than ten thousand—

Kamars	...	...	33,800	
Kaibarttas	...	...	28,200	
Sonars	...	...	26,800	
Chamars	...	...	25,800	
Haris	...	...	20,800	
Malakaras	...	...	18,700	
Rajputs	...	...	15,800	
Telhis	...	...	14,500	
Kansaris	...	...	13,400	
Baisya	...	...	11,400	
				208,700

V. Others—small castes—persons described by religion, profession and nationality, about 400,000

'Total, nearly ... 3,750,000

It would be out of place for me now to discuss fully the castes in Orissa. I should like to say enough to stimulate the interest of scholars and of others who have more leisure to study than myself. Probably the population of the three districts is now nearly four millions. I merely wish to say a few words about the Brahmans and Goalas, as two of the castes which represent the more Aryan types, the Khandaits as representing ancient Kaattriyas or warriors, the Chasas as a peaceful offshoot of the warriors, the Kandras and Pans (and Bhuiyas) as representing the rank and file of the army of which the Khandaits were chiefs, and lastly the Savars, Bauris, and Gokhas who still represent the aboriginal tribes. I hope that this very brief account of nearly three-quarters of the population may encourage further enquiries. There is especially one point on which inquiries may well be made. Every caste, whether literate or illiterate, has its different "*santak*" or caste mark which is affixed by the illiterate to documents in place of signature. Connection between castes and community of origin may perhaps be traced by further enquiry. *

220. The process by which the superstitions and habits of the aboriginal tribes are superseded by Aryan customs is described in Mr. Risley's ethnological work. Illustrations of the fictions by means of which one caste or sub-caste may climb into another, and the devices by means of which non-Aryan castes have obtained the services of priests and even Brahmans to perform their ceremonies, are to be found plentifully in Orissa, and the different stages of development are perhaps more interesting (because they are more noticeable) than in almost any part of Bengal. We find in Mr. Risley's work the following:—

The Brahman who serves the Bhumij samindar as a family priest takes a higher place than the casual Brahman who ministers to the spiritual needs of the ordinary cultivator.

As an illustration of the use of Brahmans may be mentioned the fact that the (true) Karas, the most reputable caste after Brahmans in Orissa, will only employ Utkala Brahmans. The principal step in bringing Orissa under Aryan influence was, as has been already mentioned, the importation of Brahmans from Oudh. Their attitude towards the local priests (the potato-growers) described by Hunter is very remarkable. The number of Brahmans

at present is about four lakhs. Of the castes which rank high in Orissa, as compared with the rank they obtain elsewhere, we may mention the Goalas.

The Orissa Goalas affect a high standard of ceremonial purity, and look down upon the Behar and Bengal divisions of the caste. The Mathurabasis lay stress on the duty of making occasional pilgrimages to the home of the caste at Brindaban. The Jaduparia Goalas cherish the tradition that their ancestors came to Orissa from Jadupur. (*Risley*).

In 1891 we find that Goalas amounted to 2½ lakhs. Thus we have two of the most respected castes in Orissa (Brahmans and Goalas), amounting to 6½ lakhs, or more than one-sixth of the entire population. In both cases traditions remain regarding their ancient homes.

Mr. Risley's account of the Chasas, Pans, Bhuiyans and Khandaits* may well be perused. Out of the present population in the three districts with which we have to deal, more than one-third, i.e., 1,300,000, consist of Khandaits, Chasas, Kandras, and Pans—all descendants of the old militia. As regards the Chasas, though they number more than 427,000 in the three districts, they are said to be Orh-Khandaits, a sub-caste of Khandaits. "Jana" is found as the "surname" of some of the lowest Chasas in Orissa, also of Pans, also of Kandras and also Khandaits. The Kandras and Pans are well known as having formed the rank and file of the ancient militia of the Province, and the leader of the paiks was a *khandait* or swordsman, i.e., the wearer of the *khanda* or sword.

In Orissa the Khandaits exhibit every variety of type from the high Aryan of good social position to the semi-aboriginal mongrel taken from the dregs of the people. (*Risley*).

The land-owning Khandaits in Orissa pretend to be Rajputs and affect strict conformity with orthodox usage. A Sroetha Khandait assumes the sacred thread at the time of his marriage, a practice not uncommon among castes of dubious origin who are pressing to be counted among the number of the twice-born. The Chasa Khandaits do not wear the thread, but Brahmans will take water from their hands and they occasionally intermarry with the Karan caste.

To my mind a study of the origin of the Khandaits in Orissa would throw great light on the history of the people. In paragraph 200 above we learn that Manu says that—

The Paundrakas, Odras, and Dravidas and various well-known nations on the north and north-western confines of India were Ksattriyaas and sank generally to the rank of Sudras by reason of the neglect of sacred rites and the absence of Brahmans.

This was of course written long before 437 A.D., and shows that Orissa was then occupied by a military race. There seems to be no doubt that these Ksattriyaas are the ancestors of the modern Khandaits. I simply put forward my belief that they were a military race who subdued the aboriginal tribes. It is impossible to say that they were Aryans, but at least they were known as Ksattriyaas, i.e., a warrior tribe (see also Dr. Rajendralal Mitra, as quoted in paragraph 217).

Furthermore, as we have seen, the Khandaits recruited their army from the Kandras and Pans, while they maintained the leadership as Khandaits or swordsmen.

Owing to community of occupation, i.e., service in the army, the Khandaits, Kandras, and Pans all bore the name of Jana. In the later stages Khandaits must have become a mixed race; the lower branches depended on cultivation only and became Chasas, and the higher branches, as their military duties became lighter, have also become cultivators or proprietors of estates.

We have seen that the highest Khandaits are still regarded as Rajputs, that the wealthy may intermarry with Karans, and that many Khandaits only wear the sacred thread after their marriage. In addition to all this, Chasas are generally known as Khandaits, and the wealthiest of them actually become so.

* Khandaits	600,000 (in 1891).
Chasas	427,000
Pans	156,000
Kandras	135,000

Total ... 1,318,000

This elasticity (if it may be called so) bears out Mr. John Beames, who says that—

The Khandaits appear to be a heterogeneous group, made up at the one end of Aryan immigrants from Upper India, and at the other of recruits from a number of indigenous non-Aryan tribes.

Mr. Risley considers the Khandaits to be "Bhuiyans of the southern tribe." He has found:—

First, that the Khandaits of the Chota Nagpur Division who say that they immigrated from Orissa twenty generations ago, and many of them still speak Uriya, regulate their marriages by the totemistic sections characteristic of the southern Bhuiyans and call themselves Bhuiya-Paiks. *Secondly*, that among the numerous titles of Khandaits in Orissa we find the very singular names *Uttar*, *Dakkin*, and *Paschim-Kapat*, which are assumed by the Bhuiyas of Singhbhum. *Thirdly*, that as lately as 1825 (Stirling) the term Bhuiya was current as a synonym for Khandait even in Orissa, where it now seems to have fallen into disuse.

Again, speaking of Bhuiyas, Mr. Risley says:—

The main body of southern colonists furnished the tribal militia of Orissa, and have now sunk the Bhuiya in the Khandait or swordsman—a caste of admitted respectability in Orissa, and likely in course of time to transform itself into some sort of Rajput.

Another theory has been advanced as to the meaning of the name Khandait. It is suggested that Khandait may mean merely a *settler* instead of a swordsman. *Khanda* means a portion or portion of land as in Nahakhand and Bisalkhand (names of parganas) and in Khandpati. Khandait would then have a meaning analogous to Bhuiya.

In conclusion, I do not think we can accept as proved any more substantive facts than that, before the Aryans came in the fifth and sixth centuries A.D., a warrior race now known as Khandaits had already conquered Orissa. Former tradition called them Ksatriyas. Stirling, too, frequently speaks of Khetris or Khandaits as synonymous and quotes the speech of Raja Anang Bhim Deo from the Puri Temple Records to show the ancient conquerors.

By the grace of Sri Jaggannath the Ganga Vansa Princes have after conquering the Khetris and Bhuiyas added to the kingdom.....

Dr. Mitra, however, (see paragraph *217) distinctly calls the Khetris Hindus. They organised an army and enrolled some of the aboriginal tribes (Pans, Khandras, and Bhuiyas) in the rank and file and some as watchmen. The Bhuiyas as a tribe or caste have disappeared from the Orissa census list. Bhuiya survives as a very honourable title retained by the lords of the mountain-border. The connection between the religion of the Bhuiyas (tribe or caste) and that of the Khonds and of the dwellers on the western border of Orissa is alluded to in paragraph 223.

In the census of 1891 nearly 6 lakhs of persons have been recorded as Khandaits (excluding 10,000 in the Tributary Estates) and more than 4½ lakhs as Chasas. If to these be added Pans and Kandrass we have a total of nearly 13½ lakhs or more than a third of the population of the three districts.

The Pans, notwithstanding the strength they may have acquired by belonging to the militia have remained to this day a very low caste, and are not regarded as Hindus.

The Kandrass rank somewhat higher than the Pans. I cannot find any account of the Kandrass by Mr. Risley; the Pans are said to be of Dravidian origin, and Mr. Pargiter thinks they are the Parna-Savaras (leaf-wearing Savaras) who are mentioned in Sanskrit books.

The professed religion of the Pans is a sort of bastard Hinduism, varying with the locality in which they happened to be settled. In Orissa and Singhbhum they incline to to Vaishnavism. This veneer of Hinduism, however, has only recently been laid on, and we may discern underneath it plentiful traces of the primitive animism common to all the Dravidian tribes.

More than 156,000 Pans were found in Orissa in 1891, excluding 110,000 in the Tributary States, while Kandrass in Orissa number 135,000. As regards aboriginal tribes, there are still 113,000 Bauris and Savaras in the plains of Orissa, and Gokhas make up 40,000. It is known also that the Keots are a very mixed race. They number 122,000.

221. I do not find in the literature on the subject of castes in Orissa any mention of the powers which the zamindar has of bestowing "*padita*" names but such a custom does exist and no doubt it is a very ancient one. In one case I found an elder brother Laksham Mahapatra and a younger brother Ram Jana, both living in the same village. The title of Mahapatra (Patra—a vessel, a fit and capable person, a chief) was bestowed by the zamindar.

It is true that the zamindar claimed to be a lineal descendent of Raja Man Singh, being one of the so-called Rajas of Agrapara (Tappa Pursand, Balasore), but an enquiry showed that for services rendered the title of Mahapatra was not infrequently bestowed by the zamindar in the neighbourhood. We know, too, that in the village the zamindar is often spoken of as "Sirkar" and his *nij-jote* lands as *Sirkari*. We know also that the Raja of Khurda is still regarded as the fountain of honour (cf. Captain Macpherson). Amongst the titles bestowed by him is that of "Paharaj." The derivation of this title, given me by a great authority (Mr. R. Cornish, for many years Collector of Balasore), is as follows:—The Raja of Puri (Khurda) cannot die. On the death of one Raja and until his successor is put on the throne various chiefs are styled Raja in local areas. They bear the name of *Paharaj*, which is said to mean Raja for a "prahar." It must be added that many authorities believe that only the zamindars of ancient lineage have powers to bestow *padita* names. Mr. James Taylor tells me that in the Tributary States of Baramba every other Pan or Hari is a "Singh," the Raja having distributed these titles for a few rupees. He tells me that in addition to the powers possessed by Government and Rajas to grant titles, an entry in the Settlement records is considered to constitute a valid claim to a title. "Many (titles) were granted at the last Settlement and during the present Settlement operations many wealthy or educated men of the lower castes have been promoted to higher castes by the grant of superior titles or surnames. With respect to the castes into which they have been received all scruples have been allayed by money payments, feasts, religious ceremonies, etc." I may add of my own experience that, among others, Government servants, honorary magistrates, and temporary muharrirs have improved their position. A few instances will suffice, e.g., the substitution of Chaudhuri and of Samanta for Babu as a prefix; and of Mahapatra for Patra, or Patnaik for Naik as an affix. There is also a case of a Bengali zamindar, a Sunri, described in the Settlement papers as "Bengali" by caste. He hopes, I understand, some day to be described as a Kayasth.

(E)—*The Peoples of Ancient Orissa—their Religions.*

222. We have already seen that the earliest religion in Orissa was that of the aboriginal races inhabiting the forests and hills; next came Buddhism from the fifth century B.C., to the fifth century A.D. After this we find the worship of Siva, and lastly the worship of Vishnu (revived as it is said) in the twelfth century. It is, however, fairly certain that at Jajpur and elsewhere a form of Hindu religion existed before the advent of Buddhism. The number of Muhammadan converts is small, and of Christians inappreciable.

223. The best account of the religion of the Khonds is to be found in Asiatic Society, Vol. XIII, Part II, Article XII, "An account of the Religion of the Khonds in Orissa," by Captain S. C. Macpherson. He describes a "distinct theism with a subordinate demonology. The supreme being, the sole source of good, the god of light, created for himself a consort—the earth goddess, the source of evil—and thereafter he created the earth with all it contains and man. The god of light and his rebel consort contended for superiority until the elements of good and evil became thoroughly commingled in man and throughout nature. Other deities were created by the supreme being to teach men the arts of life, etc. A god is generally known as Pennu and a priest as Janni." Janni is probably the sacrificial priest, the *sebit* is the Deori (called Dehri, by Captain Macpherson).

It is also noteworthy that the name of the supreme god is Boora Pennu among the Khonds, while Colonel Dalton tells us of the Bhuiyas in Chota Nagpur that "Boram is the sun, the first and greatest of gods and the creator." "The (the Bhuiyas) have their own priests, called Deoris."

In every village in the plans of Orissa we find a village goddess; her priest is generally a *Bhandari* or barber, and along the western frontier we still find forest deities presided over by *Deoris* (the *Dehri* priests of the Khonds), described by Mr. Risley as *Sudhas* but really I think, a class of *Malis*. These *Deoris* wear the sacred thread in Orissa. For accounts of the human sacrifices performed by the Khonds and for early instances of the connection between Khonds and Uriyas in the matter of religion as well as political arrangements, not only is Captain Macpherson's article above referred to full of information, but the Asiatic Society's Journal, Part I, Vol. XVII, Article I, "On the Uriya and Khond Population of Orissa," by Lieutenant J. P. Frye may be perused.

Mr. A. C. Sen, I.C.S., (letter No. 276 of 22nd February 1896, from the Magistrate of Puri to the Commissioner) offers some conjectures on "Early History of the District of Puri." He believes that a race of *Ods* or cultivators came from the south, spread over the plains of Orissa, drove the aborigines into the hills (except the few fishing tribes), and with the help of Kama Brahmins colonised Orissa. I cannot find reference to the Kama Brahmins or to the *Ods* of the south in any work of authority, nor do either appear to be mentioned in any Sanskrit work. These conjectures are opposed to what Mr. Pargiter has collected from Sanskrit books in his paper but Mr. Sen derives his information from local tradition in Puri, and I must allude to what he has said before introducing the very interesting information he gives us on the subject of the evolution of the religions of Orissa. Besides, we know that the kingdom of Orissa stretched down towards the Godaverī and that invasions from the south frequently appear in the palm leaf records of the Puri Temple.

It is worthy of note also (see Risley) that among the Brahmins of Orissa "unquestionable traces may be found of the totemistic beliefs which are common among the Dravidian and semi-Dravidian groups.....they may be due to the adoption by immigrant Brahmins of Dravidian beliefs and observances; or they may show that the Brahmins of Orissa are themselves Dravidians or have undergone a considerable infusion of Dravidian blood."

Mr. Sen introduces us to the Khonds and Savars inhabiting the sandstone hills of Dhauli, Khandagiri, Udaigiri, Rameswar, and Niladri. The above tribes lived in caves and worshipped forest deities, and we know that the earliest Buddhist monks found their way to these places. Not only do the village deities (*gram debati*) still exist, but we often find in the middle of cultivation rude shrines (generally a slab of stone smeared with red) still the object of adoration by the lower classes of the village community as the abode of a forest deity.

It does not appear that temples were erected to the aboriginal gods or rather goddesses; they were not seen, and they are even now supposed to live inside the cracks and crevices of the roots of trees and in stones. (See also Macpherson and Frye).

224. Dr. J. Stevenson, Asiatic Society's Journal, Article I, Vol. XIII, in a paper read on 21st November 1840, gives us an account of "The intermixture of Buddhism with

The Buddhists.

Brahmanism in the religions of the Hindus of the Dekkan."

A reference may be made to this most interesting paper because it was one of the first of many enquiries. He describes Buddhism as "eminently a religion of reason; it rejects all that reason does not comprehend; and makes its constant appeal to (*buddhi*) the human intellect, as the supreme judge in religious things." I merely make this quotation here to show how such a religion must have influenced the superstitious Khonds and Savars in such parts of the plains of Orissa as came under the influence of the Buddhist monks.

There is, however, evidence to show that some colonisation from the north had already taken place. The Buddhists found "a priestly class already existing whom it was impossible to extirpate and unwise to ignore..." "Doubtless the preceding waves of Aryan settlers who had from time to time made their way into Orissa formed the upper ranks of the Buddhist community." The edict of Asoka inscribed on the Dhauli rock also enjoins reverence to Brahmins. Moreover in Jajpur there are traces of the settlement of Brahmins in very early times and the alleged visit of the Pandavas to Virajatiṛtha (Jajpur, see paragraph 201) would show that there was an early settlement of

Aryan religious ascetics in that place. As we have already seen the Buddhist religion flourished from 447 B.C. till 473 A.D. The accounts of the earliest settlements are mythical, but by 250 B.C., the date of the Asoka edicts, the religion was well established.

225. To return to Mr. Sen: he conjectures that Kama Brahmins dealt the death blow to the Buddhists. The Kamas, he says, were the first reformers of Orissa:—

The Kama Brahmins.

Originally worshippers of Lingam (the *linga*) or the male generative organ, they had probably from their study of the Vedas and the Upanishads and the philosophy of the Aryans, purified their religion from all sensual ideas and made it into a monotheistic religion of the creative energy of the deity. The most common name of their god was Mahadeva, the great god or the god of gods. They also gave to their god some of the best names yet known to the worshippers of any religion. He was called the Parameswar, or the lord of lords; the Bhubaneswar, lord of the world; Lokenath, the lord of the people, and Biswanath, the lord of the universe. They created beautiful temples and dedicated them to their god all over the Province, selecting the most beautiful sites existing in it, with the instinct of true lovers of nature. They built villages on the most advanced sanitary principles. They excavated magnificent tanks and sank beautiful wells. They were great cultivators, and with the help of the Ods reclaimed almost the whole of the culturable waste land of the Province. They were the first to make embankments and to raise roads in Orissa.

These are indeed glowing periods.

In support of Mr. Sen's story of the Kama Brahmins we may turn to

Sankara Acharjya.

Dr. Stevenson's paper already alluded to. We find that under Buddhist influence the killing of cows

and other objectionable rites were prohibited, and then we find that "Brahmanism as first established, or afterwards revived, in the Malhatta country, is universally by the natives traced to Sankara Acharjya, whom they deem an avatar of Siva raised up to put down the Buddhists. He is generally supposed to have flourished at Kalapur at the commencement of the ninth century of the Christian religion." Perhaps, therefore, the disciples of Sankara Acharjya found their way into Orissa from the south, but the date is three or four centuries too late.

226. Mr. Sen's conjectures on the subject of the disappearance of

Disappearance of Buddhism.

Buddhism are still more circumstantial than the information given by Hunter or the other authorities.

After showing the manner in which each succeeding religion compromises with the other, he continues:—

Even in the most elaborate caves of Udaigiri not a single figure of worship can be seen. The lingam (the *linga*) was the only idol of the first Kama temples. But in the caves of Khandagiri, separated from Udaigiri only by a slight depression, we first see the figures of Buddha in contemplation. Underneath these figures were afterwards carved figures of Thakurani, a female deity among the hill people, who was afterwards Hinduised into Sakti and Parvati. It is noteworthy that they have all been made on the model of the Buddha's figure. At the gates of the largest of these caves was afterwards added the figure of the Mahabir (the greatest hero) or Hanuman (the monkey god), another aboriginal object of worship.

227. The Buddhists were ultimately driven out to the west and built the temple at Niladri in Khurda. It was here that

Derivation from Buddhism of the worship of Jagannath.

they began to carry Buddha's tooth along a broad road or *baradanda* in solemn procession. This

ceremony is admitted to be the origin of the *Rath Jatra* or car festival of Jagannath. Dr. Stevenson also writes as early as 1840:—

To my mind, however, the most singular result of the influence of Buddhism upon Brahmanism is the transformation of two Buddhist or probably Jain devotees, a male and female, into a Hindu god and goddess. Within the precincts of the temple at Pandarpur there is no distinction of caste. Vethal, the proper name of the god, means—He who receives the ignorant; at least, so his votaries interpret it. This is another feature of Buddhism directly opposed to the Brahmanical religion.

While reflecting on this subject, it has occurred to me that many of the arguments I have used will apply also to Jagannath in Orissa and that the worship of that god, also, is derived from Buddhism, since—

1st—There is no distinction of caste within the holy territory of Jagannath.

2nd—Buddhism anciently prevailed in the Province of Orissa, as appears from the Buddhist remains still existing.

3rd—The *Rath Jatra*, just immediately preceding the Sayana Ekadasi, or season of sacred rest, is probably the remains of a triumphal entry, with which the sages were welcomed on returning from their peregrinations, to hold the *Wasso*.

4th—The image of Jagannath is said, and universally believed by his votaries, to contain the bones of Krishna. Now every one conversant with the opinions of the Hindus, knows that it forms no part of the Brahmanical religion to collect and adore dead men's bones. The doctrine of the *Gita* on this subject is that at death elements separate; the spirit returns to its parent spirit, the air to air, and the earth to earth. On the other hand, it is a most meritorious act among the Buddhists to collect and preserve the relics of departed saints, and the places that contain them are esteemed peculiarly holy.

228. It is worthy of note that Mr. Sen attributes the Bhubaneswar temple to the Kama Brahmins, but I have again failed to identify the source from which he has drawn his

Bhubaneswar.

information.

Hunter tells us that "from time to time great migrations of Brahmins radiated to the southward from Hindustan, bringing with them the modern or Hindu form of the Aryan religion and imposing it upon a recently Buddhistic population." He quotes the palm leaf records of the Puri Temple to show that in A.D. 500, the founder of the Lion Kings imported 10,000 Brahmins and planted them round Jajpur. The latter became the metropolis of the priests, and Bhubaneswar the political capital of the Sivait Dynasty of Orissa (Hunter, Vol. I, page 200). Mr. Sen, however, is very emphatic on one point—

These Aryan kings were the great sakti-worshippers, and not worshippers of Siva as Hunter wrongly supposed, though like many other Hindus of old they absorbed Sivaism into their form of worship.

Mr. Sen adds as regards Bhubaneswar that in order to compromise with the "aboriginal followers of Buddha the *yonī* (*puṇḍrī mulicre*) was added to the lingam [the *liṅga*] at first only as the female energy, but afterwards as Parvati the wife of Mahadeva. From this union sprung thousands of gods and goddesses." This is very doubtful.

In the face of such progress Buddhism decayed, and Buddha's tooth was taken first to Taniluk (Tamilalupta) and then to Ceylon, while the Niladri temple fell into ruins.

229. The worship of Siva does not appear to have ever been the religion of the country. Buddhism "melted not into Sivaism but into the Vishnuvite rites of Jagannath."

Siva worship.

The imported priests, "true to the orthodox instincts of Brahmanism, continue Siva worshippers to this hour; they represented no spontaneous or natural outcome of the religious cravings of the people, but an exotic of royalty which flourished upon the crown lands. While therefore the story of Jagannath is interwoven with the religious history of the Province, the annals of Siva-worship in Orissa deal with little else than the building of temples and grants of lands to the priests." From 1132 A.D. onwards the reigning dynasty were followers of Vishnu. This dynasty produced the present temple of Jagannath at Puri (1198) and the temple of Kanarak (1282) on the coast 20 miles north of Puri. An account of the worship of the sun in Orissa is given in pages 283 to 286, Volume I, of Hunter. I cannot do better than close this account by an extract from Hunter on the present popular religion in Orissa:—

Buddhism, Sivaism, Sun-worship, each in turn became the prominent faith of the Province, and after a time gave place to some other creed. Jagannath was destined to hold a more permanent sway; and his priests, by skilfully working upon the Indian passion for pilgrimage, have for six centuries made Orissa a *terra sancta* of the Hindus. He owes his long reign to that plasticity which admits the whole Hindu pantheon within his walls, and which during six hundred years has ever instinctively accommodated itself to the changing spirit of the times. In the very act of superseding Sun-worship and Sivaism, his priests built temples to the wife of the All-Destroyer and to the Sun within his sacred courts. A truly Aryan deity, he commanded the adoration of the upper classes. At the same time he enlisted the sympathies of the low castes by the equal sacrament of the Holy Food, and by a mythology which exalted a despised fowler into the revealer of the God. By the ingenious device of successive incarnations, Vishnu has made himself the centre of a whole cycle of religious systems, and secured the adoration of many races, belonging to widely separated stages of civilisation. Without losing his own identity he assimilated the

attributes of nine of the most popular gods, and his priests keep a tenth incarnation in their hands; a weapon which they may yet utilise to bring the gross superstitions of the people into accord with the theism which English education has now disseminated among the upper classes.

Jagannath has assimilated to himself a wider range of attributes than any of the gods of Rome or Greece.

While on the intellectual and spritual side of his nature he claims to be identical with Buddha, the ninth incarnation of Vishnu, he stands forth the hero of the Warrior caste, as Rama in his seventh incarnation; and has drawn to himself the sympathies of the pastoral races, as Krishna the eighth appearance of Vishnu upon earth. Krishna, the divine Herdsman, is the incarnation which specially appeals to woodland or pastoral peoples, and which has chiefly attracted them to Vishnu-worship. These races have always ranked below the Aryans, and are now despised as aborigines or inferior castes; yet their allegiance to Vishnuism has been skilfully obtained by identifying one of their national deities with the bright Aryan God.

230. The Jain religion in Orissa does not appear to require special notice.

Jains.

We know that the Ganga kings built a temple to Mahadeva on the top of Khandagiri hill and adorned it with an attenuated figure of Buddha, and that about a hundred years ago (according Mr. Sen) "a Cuttack merchant of the Jain sect created a Jain temple here out of the materials of the temple of Mahadeva."

231. Mahomedans and Afghans made few converts in Orissa; the last

Mahomedans.

census shows about 75,000 persons described as Mahomedans. We find settlers in nearly all the large towns and hamlets along the trunk road and along some of the oldest routes into the Tributary States. The Mahomedans do not appear to have collected in large numbers except in Cuttack town. Some Parganas contain none at all. In Pargana Ambohattu (Balasore) I found one Mahomedan household, the descendants of a zamindar's *barkandaz*. The most curious instance of converts to Islam is that of the family of the Government Pleader of Balasore. All members of his family are still known as Bhuian (Bhuinhar or Bhupati). They were chief priests of the Raja of Puri and received their estate of Garhpada from the Raja. For fear of the Moghul emperors they turned Mahomedans rather than lose their estate. Their family residence, however, is still called Uriya Sasan, and their Hindu family idols are still preserved and some religious worship goes on.

232. Christianity has not set its mark on the Province. In the famine

Christianity.

of 1866 the missions in Orissa saved the lives of hundreds of starving orphans and adopted them. The religions of Orissa share with us many legends and miracles. Two may be mentioned by way of example. (1) The rout of Red Arm and his host (see paragraph 18) by the waters of the Chilka, which receded and stood up till they came close and then descended and drowned the impious invaders. (2) The troubling of the waters of the well at Bhubaneswar on the first day of the *Rath Jatra*. The water acquires special healing efficacy on that day, so much so that the first pot drawn sold for Rs. 500 a few years ago, the second pot for less, and so on.

No doubt the religious history of other parts of India has developed in the same way as that of Orissa—for an almost exact parallel I may refer to the Asiatic Society's Journal, Volume XIII, Article XII, "On the modern deities worshipped by the Hindus in the Dekkan," by Dr. Stevenson:—

The religion of the Hindus of the Dekkan seems to me to consist of four constituent parts: first, *Pure Brahmanism* as contained in the Vedas and Puranas; second, *An ante Brahmanical worship* consisting in the adoration of painted stones, which are not acknowledged as objects of worship by the Brahmans but considered as the representatives of demons; third, *Buddhism* or that modification of it which subsists among the Jains, and under which head falls the worship of the Pandnarpur Vitthoba; fourth, *A local superstition* based on Brahmanism, and consisting of the worship of remarkable persons who have arisen in the Mahratta country in times comparatively modern.

CHAPTER X.

EARLY REVENUE SETTLEMENTS.

233. Stirling in the early part of this century gives us an account of the Province. He tells us of the legend that under

Earliest accounts.

the sovereign at Delhi was a great kingdom held by feudal lords who were dependent on and owed service to the lord

paramount. The most powerful lords of this empire were the *Gajapati*, *Aswapati*, *Chhatrapati*, and *Narapati*. These lords in the course of time threw off their allegiance and became independent monarchs ruling over numerous inferior *Khetris* or *Cshetriyas* (both spellings are found in Stirling). Thus the *Gajapati* became Lord of Orissa.

Stirling divides the Province of Orissa into three portions—

- (1) The marshy woodland tract extending along the seashore from the Black Pagoda to the Subarnarekha.
- (2) The plain and open country between this and the hills.
- (3) The hill country.

The first and third are known as the Eastern and Western Rajwara or Zamindara, that is, the country occupied by the ancient feudal chieftains, khandaits, zamindars or poligars of Orissa; the second as the Mogulbandi or Khaliseh, or Kot, being that from which the indigenous sovereigns and Mogul conquerors of the country derived the chief part of their revenue and which at present pays a rent to the British Government of sicca Rs. 12,64,370, whilst the tribute yielded by the other extensive portions is fixed in perpetuity at the low sum of sicca Rs. 1,20,411.

In the above items the *juma* of Khurda is not included.

The rulers of the Rajwara were *Khetris* (*Kshe triyas*), or *Khanduits* (wearers of the *khand* or national sword), or *Bhuiyas* (*Bhupati*, lord of the soil), or *Poligars* (from *P'illam* a fief in Telugu), or *sawants* (chief lords), or *Sevakan Arni Das* (hereditary servants holding lands); or, lastly *zamindars*.

A noticeable point appears to be that the title of *zamindara* was applied only to the Rajwara and never to the Khaliseh.

The present location of chiefs in the hills and on the coast was, according to Stirling, made by Raja Anang Deo, who created 16 *sawants* in the twelfth century. They were placed so as to repel the attacks of the aboriginal savages. "In this point of view their situations and duties resembled much that of the Lords of the Marshes in Europe." Under these lords, who lived in *garhs* or *killas*, were military retainers—*Naiks*, *Dallais*, *Dulbehra*s and *Khanduits*, holding subordinate fiefs, and under these again were the *paiks*, both soldiers and cultivators.

The domains reserved for the Crown were of course the most valuable and fertile, "and it was the uniform policy of the strong Government of the Mahomedans constantly to enlarge this share by the gradual subjugation and usurpation of the lesser chiefs and princes."

234. The early Hindu rulers of Orissa recognised no middlemen between them and their subjects, and every cultivator was in theory bound to pay to his sovereign a share*, variously estimated at from one-twelfth to one-fourth of the gross produce of his land. The nominal proportion was one-sixth (*sastansha*) at the outside, but in fact was often more. Phillips (Tagore lectures) says:—

One twelfth in prosperity and one-fourth in time of urgent necessity. We find two parties primarily interested in the land so far as its produce is concerned. These are the king and the cultivator, and there are no independent intermediate interests.

The residents of each village paid their quota through a headman (*padhan*) who, in consideration of his services in collecting the revenue, was allowed to hold free of all payment a certain share (*heta*) not exceeding one-twentieth, of the total land in cultivation, and probably also retained some part of his collections as a perquisite of his office. The village accounts were checked by the accountant (*bhoi*) who was also paid by the grant of a few acres free of assessment. These villages were grouped into large divisions (*khand* or *bisi*) of 10 to 50 square miles, the prototype of the modern Pargana, many of which are still known by their old Hindu names as *Nahakhand*, *Derabisi*. Over each of these divisions was an executive officer or *Khandpati* who acted as the representative of the sovereign, and with the assistance of the Divisional Accountant (*bhosmul* or *bisci*, collected the revenue, and handed it on to the head of the district, *desadhipati*.

We find that in parts of the Deccan the same description of officers still exist and are called *Des Mukh* and *Des Pandia*, terms of precisely corresponding import (Stirling).

* See Lord W. Bentinck's Minute of 1833, paragraphs 6 to 10.

This was the system in the regulation provinces of the Hindu Kingdom, but along the hill borders and on the scantily populated littoral the land was held by military chiefs* who paid a tribute to their suzerain, and were independent as regards the internal administration of their properties.

235. The first regular settlement of the province was begun in A.D.

Akbar's settlement.

1582 by Akbar's victorious general Todar Mull and concluded in 1591 by Raja Man Singh. He for the most part left untouched the border chieftains; and Khurda, together with the estates of Lembai, Chaubiskud, Rahang and Sarai, he assigned to the Hindu prince Ram Chandra Deo and to the Temple of Jagannath, i.e., the Raja of Khurda received the rank of Commander of 3,500, and under his control were placed thirty-one "zamindaris of Hindu sirdars, containing 129 *killas*" (i.e., thirty zamindaris and his own estate of Khurda).

To the two sons of the old independent chief Telinga Makund Deo were given the rank of Commander of 500, i.e., the Raja of Sarangarh (Patia) received under his control thirty-one zamindaris (including Patia and Balunta his own property) containing 38 *killas*, while the Raja of Aul received (including his own zamindari and *killa*) twenty-four zamindaris containing 42 *killas*.

We find in the above zamindaris several of the present Tributary States, e.g., Baramba and Dhenkanal under Khurda, also Banki now a part of Cuttack and Angul; also Gumsar and Kalikote, now in the Madras Presidency.

"The more distant zamindars were separated from the control of the superior Raja and placed under seven principal zamindars or *sawants*, viz., Keonjhur, Mohurbhunj, Bishanpur, Fattiabad, Naraingarh, Kuwanger, and Nag or Bagbhum." The last four are now in Midnapur.

Under these chiefs we find Ragri and Balarampur (under Keonjhur) and Nilgiri and Janikunda (under Mohurbhanj). Ragri and Balarampur are now known as *Killajuts*, i.e., they are in the temporarily-settled area and have been separately treated in the present settlement (see paragraph 610). Nilgiri is now a Tributary State, while Janikunda is an ordinary temporarily-settled revenue-paying estate. It may also be noted that Manbhum and Singhbhum are included under Bishanpur. A perusal of the lists given by Stirling in page 68, *et seq.*, will be found most interesting to the District Officer.

In the central and most highly cultivated portions of the present districts of Cuttack and Balasore and part of Midnapur south of the Subarnarekha, Raja Todar Mal made a detailed settlement fixing the rates of rents in every village. He confirmed in possession the hereditary Hindu officials of the Pargana (*Khand* or *Bisi*), the *Khandpatis* and *Bhoins* becoming *Chaudhris* and *kanungos* and being entrusted with the collection of revenue and the other rights and liabilities of zamindars for the portion of the Pargana or *taluk†* under their direct management. The village headmen he maintained under the appellation of *muqaddam*, an Arabic word meaning headman, commuting their customary right to hold one acre in twenty free of assessment to a grant of a definite quantity of land‡. Where there were no hereditary headmen or, where the *padhar* had been dispossessed, collections were often made through an agent (*karji*) or farmer (*sarbarahkar* or *musajir*) appointed by the *talukdar*, and many of these developed into hereditary tenure-holders with rights almost equal to those of the *muqaddams*.

236. The *talukdars* were remunerated by grants of land (*ndnkar*) for

Allowances for collection of revenue.

their support, and by deductions of 5 per cent., (*rusum*) from the gross collections of the villages in their charge, as well as by permission to collect what they could in the form of octroi, market dues and other extras (*soir wasiwai*). Mr. Trower§ reported that under the Mahomedans the land-owners got a deduction of 10 per cent., besides one-twentieth on the total collections in the form of rent-free land. Nominally 1 in 20 was the customary deduction, but it was probably greater in the case of zamindars than in that of *chaudhris*, and less still for the *kanungos*. For the supervision of these landholders Raja Man Singh grouped the Parganas into three *sirkars* of Cuttack, Bhadrak, and Jaleswar, each under charge of a chief executive officer

* *Khandais* and *Bhunas*, *surants*, *shekals*.

† *Taluk*, an Arabic word that may be translated "sphere of influence." Sometimes also called "Tappa."

‡ *Jagir*, or *petra* = ancestral.

§ See Babu Hanga Lal Banerjee's report on the Cuttack Tenures.

called an '*Amil*' and of a checking revenue officer or *Sadar kanungo** with several subordinate collecting agents (*gumashtas*), paid originally by a percentage on the collections.

237. The *talukdars* and superior officers were nominally appointed by the sovereign or his representative, and were so far officials that they acted jointly in making or sanctioning alienations and assignments of the land or its revenues, and were removable for bad conduct; but under the two centuries of misrule and revolt that followed Akbar's reign their hold on the land grew stronger, and the right to appoint lapsed into a purely formal custom of confirmation of the heir of the deceased official, and even the *Amil* and the *Sadar kanungo* came to hold large estates, stepping into the shoes of dispossessed *talukdars* for whom they stood security. Their office was abolished by the Mahrattas, who appointed *Amils* and *Sadar kanungos* of their own, and at the British conquest these ex-officials were found only as holders of large and valuable estates. The subdivision of *taluks* appears also to have been allowed, for in one Pargana there were often more than one *taluk chaudhri* or *kanungo*, each being distinguished by the name of the particular landholder. So we find in the Mahratta revenue roll of Pargana Randia Orgura:—

- (1) Taluka Sadar, Kishen Persad Rai Mahashai (the Sadar kanungo).
- (2) „ Kanungo Wilayati Jasamant Rai.
- (3) „ Fakir Chaudhri.
- (4) „ Bip Charan Chaudhri.

Similarly in Pargana Khandi Bisi the Pargana registers of the Mahrattas showed four *taluk kanungos* and one *taluk chaudhri*.

Stirling gives us the following summary regarding these officers of State:—

To control and superintend the local officers of the old *régime* and to maintain the principles of the old settlement inviolate, the offices of Sadar kanung, and Sadar Chaudhri were instituted by Akbar, or rather by his Dewan. The Sadar Chaudhri, kanungos and their establishments should be carefully distinguished from the *elasti* or local and country chaudhri and kanungos, the officers of the former Hindu Government. Whilst the latter were all Uriyas, the newly-created officers were invariably filled by natives of Bengal.

238. Besides the *talukdars*, there were also a few landholders in possession of whole Parganas. They alone were officially styled dependent Hindu sirdars or zamindars, and were generally either descendants of the old reigning princes, as in the case of the zamindar of Utikan, who was the Raja of Kanika, or the zamindar of Saibir, who was the Raja of Patia, or were border chiefs (*knandait* or *bhuiyan*) such as those of Darpan, Madhupur, Balarampur, Chausatpara, Ambo.

Besides these two classes, a good many superior officials were appointed zamindars in return for special services. Such was Trilochan Patnaik, the Amil, who was appointed zamindar of Kotdes and the neighbouring lands.

It appears that the Mahrattas recognised sixteen of these zamindaris in the Cuttack district† and one in Puri. Like the *talukdars*, they all hold under deeds of appointment, and though their position was more honourable, their rights and liabilities did not in any way differ from those of the Pargana officials.

It is easy to see from the foregoing account of hereditary zamindars, officials, and officially-created zamindars that a general fusion of rights and titles must inevitably take place.

Stirling gives the following reasons for the general extension of the term "zamindar" in Orissa:—

- (1) The lack of distinction between the ancient zamindars and the *talukdars* created by the Moguls with hereditary offices.
- (2) The confused and inaccurate application of the term by the zamindars.
- (3) The failure to distinguish between the inheritance and sale of an office and the inheritance and sale of the land with which that office was connected.

* Lit. chief expounder of the law; he was sometimes called a "Mahashai"—master.

† Babu Ranga Lal Banerjee's Note on the Cuttack Tenures, paragraph 36.

Whilst *talukdars* became exalted to the rank of zamindar, the proper zamindars mounted a step higher and styled themselves Rajas. Every hill and jungle zamindar of Orissa has been pleased invariably to adopt the style and title of Raja.

239. In 1742 occurred the first invasion of the Mahrattas. From 1751

Mahratta System.

A.D. Orissa became a Mahratta Province under the management of a *Subahdar*. The new conquerors made in theory no change in the fiscal organisation, but recognised the people whom they found in possession of the land without asking inconvenient questions. Orissa, the most peaceful part of their dominions, they looked upon solely as a source of revenue, and to this end appointed 32 *amils* to look after the collections and under them distraint officers (*krok sasawal*) to squeeze the uttermost farthing out of the people. Defaulting *talukdars* they unhesitatingly dispossessed, and where they found a village headman strong enough to be independent of the Pargana official, they allowed him to pay his revenue direct

Maskuri estates.

into the treasury. To some extent this had been the practice in the later days of the Mogul régime, when numerous independent estates* were created by grants to ministers† of State or for the maintenance of the Nawab's household‡. These estates consisted generally of numerous small parcels of land in different villages, an inconvenient arrangement in many ways, but perhaps intended to give these officials an interest in touring or to provide them with a foothold in the different villages. The accounts were kept separately as direct collections (*hazur tahsil*) and were credited to the support of special departments. The origin of the *talukdars* or Parganas of Jainabad and Saidabad is peculiar. It is said that they were created for the support of Jains Bibi and Saidi Bibi, the sisters-in-law of the Mahratta Dewan, who compelled every *talukdar* under his control to contribute their quota of land. To the category of petty separate revenue units were subsequently added the alienated estates known as *kharidagis* and the resumed *jaqirs* of torch bearers (*masalchi*) or yeomanry (*dograi*); while, as before-mentioned, the Mahrattas also accepted direct payment from many village headmen. All these estates were known as *mazkuri*, or specified, and their holders were treated as having exactly the same rights as *talukdars*, though the position was one of less dignity.

240. During the fifty years of Mahratta rule, or rather misrule, the

Mahratta extortion.

position of cultivator and payer of revenue (*mal-guzar*) was one of extreme difficulty. Lists of estates for farming leases were put up to auction in Nagpur and were bought sometimes by two or three persons, all of whom came to Orissa and tried to levy what they could. These persons, known as *asamis*, were responsible for the collections of revenue. The Mahratta demands knew no limit, default in payments subjected the *talukdar* to dispossession, imprisonment, and fine, and when all other means failed, the Mahratta cavalry harried the country and plundered the villages. The *talukdars*, when pressed, retaliated on the people by levying extraordinary cesses and so-called voluntary contributions, and their exactions were only limited by the fear of driving the tenantry to abandon the village and leave the land uncultivated. When the Mahratta cavalry appeared the villagers would fly to the woods driving their cattle before them, only to return when the troops had retired; and sometimes a border zamindar was strong enough to meet force with force and beat back the invader or at least compel him to accept reasonable terms.

Along the sea coast and in the mountainous regions on the west known as the Rajwara the old organisation survived unchanged. This tract included the territories of some of the feudal chieftains who ruled over the barbarous races of the hills, and the lands assigned in Todar Mal's and Raja Man Singh's settlements to the descendants of the Hindu kings. The Raja of Khurda bought some peace from the Mahrattas by the cession of his Parganas of Delang, Rahang, Serai, and Chaubiskud, and many petty rajas along the coast were reduced to the position of ordinary zamindars, but to the last the hill chieftains resisted even the Mahrattas with some success. They were periodi-

* *Mazkuri*-specified (i.e., in the rent-roll).

† e.g., the *senkar mahals*.

‡ e.g., *Bar Nawabi*, *Khanasani*.

§ i.e., bought: they were often known as "*kharidag* *lari asamean*," i.e., "bought lands of various tenants."

cally plundered, but it was only by a considerable show of force that the Mahrattas could compel payment, and amidst the inhospitable wilds and forests the horsemen were at a disadvantage and were as often defeated as victorious.

241. With all their extortion the Mahrattas appear to have collected annually about 11 to 12 lakhs of rupees from the Province* which is less than the estimated revenue of the Moghuls; and this was to be expected, for the very rapacity of the conquerors defeated its own intentions by discouraging thrift and throwing large areas out of cultivation.

242. Such was the state of affairs when the British Commissioners in the end of the year 1803 A.D. found themselves confronted with the necessity of making a settlement of revenue for the Province.

They determined to cancel all balances outstanding from the demands of former years and to base the demand for the current year on the receipts for previous payments making suitable deductions on account of *abwabs* and excessive assessments, and on account of any sums collected in advance by the Mahrattas.

For the ascertaining of the revenue due on these terms they had at their disposal the revenue rolls of the *Sadar Kanungo* of Cuttack, Narendra Ray Mahashai, and the accounts of the record-keeper, Gopal Pandit.

The zamindars, officials, proprietors, and quasi-proprietors whom they found in possession were the following:—

- (1) The ancient zamindars of the *killa* estates.
- (2) Zamindars of Mogul and Mahratta creation, e.g., Kotdes and Utikan.
- (3) *Chaudhri* and *kanungo talukdars*.
- (4) The *Mazkuri muqaddams*.
- (5) Village accountants, *sarbarahkars*, *karjis*.
- (6) Headmen of *patnas* known as *puruthidars*. A *patna* means primarily homestead rather than arable lands.
- (7) Holders of alienated lands (*kharida*) originally sold under the fiction that they were waste (*banjar kharid ama*), also resumed *jagirs* and service lands.

243. The proposals of the Commissioners for the subsequent settlement of the Province were set forth in a proclamation of the 15th September 1804 which was afterwards embodied in Regulation XII of 1805, and I cannot do better than quote it here as a complete exposition of the principles and intentions of the officers who made the first settlement of Orissa:—

First.—Whereas it is the intention of the British Government to adopt at the expiration of the present *Amli* year such a plan for the settlement of the landed revenue of the province of Cuttack as may be most conducive to the prosperity of the country and to the happiness of the inhabitants; and whereas it is of the utmost consequence to the success of the measure, as well as to the interest of the zamindars, talukdars, and all others concerned, that the nature and terms thereof should be made known as early as possible, notice is hereby given:

Second.—That at the commencement of the *Amli* year 1212 (1804-1805), the sayer of every denomination will be separated from the mal or land revenue and a Settlement for the latter only concluded in all practicable cases which the zamindars or other actual proprietors of the soil (unless when disqualified by notoriously bad character or other good and sufficient cause) for a period of one year, it being understood that all zamindars and other landholders, and all *canaytes* shall for the present, and during the pleasure of Government, continue to perform the same duties of Police for the prevention of robberies, murders, and crimes of that nature, and for the preservation of peace and good order within their respective limits and to be subject to the same responsibility, as heretofore:

Third.—That at the expiration of the year 1212 another settlement will be made with the same persons (if willing to engage and they shall have conducted themselves to the satisfaction of Government for three years, at a fixed equal annual *jama*, which *jama* shall be formed upon a just and moderate consideration of the receipts in the year 1212 and former years.

* See paragraph 54 of Mr. Ewer's Report of 1818, printed at page 22 of the Khurda Selections. (For further details see Chapter XXII, paragraph 547, etc.)

Fourth.—That at the expiration of the fourth year a new settlement will be made with the same persons (if willing to engage and they shall have conducted themselves to the satisfaction of Government) for a further period of four years, at a fixed equal annual *jama*, formed by adding to the annual rent of the preceding lease of three years, two-thirds of the nett increase of revenue during any one year of that period :

Fifth.—That at the end of the lease for four years (which will be in *Umsil* year 1219 i.e., 1812) a further settlement for the period of three years will be concluded with the persons in possession (if willing to engage and they shall have conducted themselves to the satisfaction of Government) at a *jama* to be formed by adding to the annual rent of the preceding lease of four years, three-fourths of the nett increase of revenue during any one year of that period :

Sixth.—That at the end of these eleven years, which will be in 1222, a permanent settlement will be concluded with the same persons (if willing to engage and they have conducted themselves to the satisfaction of Government, and if no others who have a better claim shall come forward) for such lands as may be in a sufficiently improved state of cultivation to warrant the measure, on such terms as Government shall deem fair and equitable :

Seventh.—The *nankar* lands of those zamindars who may decline entering into engagements for their estates as also of those whose offers may be rejected by Government, will be subject to the payment of revenue equally with other lands in the district : but such zamindars shall for the present continue to receive in money an equivalent for what they have hitherto received as *nankar* from the Mahratta Government :

Eight.—That with respect to such zamindaris as may have been mortgaged or transferred in security and possession thereof actually given to the mortgagees or securities, the settlement will be made with the person in possession of the land as the temporary representative of the proprietor, leaving the latter to obtain possession either by a private settlement of accounts or by a judicial process :

Ninth.—That the settlement of such small taluks or zamindaris as may be only nominally included in large zamindaris in the *salar jama* of which their *jama* may be comprehended, will be made separately and distinctly with the proprietor of such small estates, and they will be allowed to pay their revenue directly to the Collector or the person appointed by him to receive it ; and in all cases where the revenue of a village has for upwards of five years past been paid direct to Government by the hereditary *muqadum* the settlement for such village will be made with the hereditary *muqadum* :

Tenth.—That with respect to such lands as are without proprietors, or the proprietors of which decline entering into engagements, a village settlement shall be made, and a preference given to the hereditary *muqadum* of those villages to which the lands belong, but no settlement is to be made with a *muqadum* for lands not included in this *muqadami* :

Eleventh.—That in the event of neither proprietors, *muqaddams*, nor other respectable ryots being forthcoming such lands as are in that predicament will be held *khas* :

Twelfth.—That all authorised *abwabs* are to be consolidated and incorporated with the land rent and expressed in the *Pattahs* and *Kabulyats*, that nothing but what is there expressed shall be collected from the ryots or under-renters :

Thirteenth.—That all persons who may enter into engagements for the Settlement must bind themselves by written obligations to grant *pattahs* of the above description to other raiyats and under-renters :

Fourteenth.—That all persons who may enter into engagements with Government must previously give security for the fulfilment thereof in an amount equal to the the largest *kist* of their annual *jama* :

Fifteenth.—Several of the tributary *Rajas* have been accustomed to furnish guards and be responsible for all robberies committed within the *Mogulbundy* lands bordering on their respective territories, and for which they have formerly been allowed to levy a tax called *Ohonpunny* or *Mongumkhandity* : those *Rajas* are to continue to furnish the usual guards and be subject to the same responsibility as heretofore ; but, instead of being permitted to levy the above-mentioned tax, the said *Rajas* will, until further arrangements can be made, receive an equivalent in money from Government :

Sixteenth.—Such being the provisions made for the preservation of the rights of the zamindars, raiyats, &c., &c., and for the effectual prevention of undue exaction, there cannot be a doubt that confidence in the protection of Government will be established amongst all ranks of people ; that cultivation will be extended ; and that the general prosperity of this province will rapidly increase.

It is to be observed that the proclamation admitted the distinction between Zamindars and Talukdars,* but the former at least were considered to be actual proprietors of the soil and were in 1815 A.D. to be allowed a permanent settlement. Meantime, by sections 33 and 34 of Regulation XII of 1805, the *jama* of the *Khandatti* estates of Darpan, Sukinda, and Madhupur was fixed in perpetuity, and the quit rent (*peshkas*) of the big estates of Al, Kujang, Kanika, Hariapur, Bishunpur, Mirichpur, and Patia, exempted from enhancement. The same regulation exempted the Tributary States from the operation

* See also section 18, Regulation XII : " zamindars, talukdars, farmers and other holders of land."

of the revenue laws and provided for registration of and enquiry into all claims to hold land free of revenue.

Collections continued to be made through the Mahratta officials, but a punctuality and completeness in the payment of revenue was required to which the Uriya proprietors had never been accustomed, and nearly a third of the estates came under the direct management of the British Collectors.*

244. In Chapter XXII, paragraphs 548, &c, an attempt is made to give the revenues settled from time to time in the area

First Triennial Settlement.

which forms the subject of this report. The figures given in the concluding paragraphs of this chapter refer generally to the whole of Orissa and include the *Garhjat* States and (often) permanently-settled areas and even Khurda. The triennial settlement of 1805-8 brought an increase of Rs. 1,20,529 to the revenue; made, it must be confessed, with very little justification. The Collectors had no information as to the real assets of the estates, for the zamindars and *amis* combined to withhold all papers, and they had to proceed on a very rough estimate of the quantity of land in cultivation and on the reports of interested subordinates as to the circumstances of the proprietors. Arrears rapidly accumulated, and in 1806 began the system of putting up defaulting estates for sale in Fort William, a policy that proved the ruin of many old Uriya families and allowed Bengali speculators to buy valuable properties at very low prices. In this year were sold 17 estates with a revenue of over Rs. 50 000 and in 1807 A.D. 266 estates paying over 3 lakhs as revenue came to the hammer. Among these was the Noanand estate in Balasore sold for Rs. 5,013, but again sold up in 1818 A.D. and bought by Government for Rs. 1.

A drought in 1806-7 further aggravated the hardship of our revenue system, but Government blindly proposed† to anticipate by ten years the date originally fixed for the permanent settlement, and it was declared that a settlement of one year should be made for 1808-9, to be followed by another triennial settlement, and that the assessment, which should be made in the year 1812, should remain fixed for ever if the arrangement received the approval of the Hon'ble Court of Directors.†

245. The settlement of 1808 produced a revenue of Rs. 14,38,912 (including the present Khurda Government estate, the *Garhjat* estates and the permanently-settled areas).

Settlement of 1807-8.

Ninety five per cent. of the revenue was collected with the sale for arrears of only 91 estates, bearing a *jama* of Rs. 21,410. This was a decided improvement on the previous settlement, during which the average annual sales were 142 with an average total *jama* of Rs. 1,66,213 while even by such severe measures only 94 per cent. of the demand was realised.

246. The next settlement produced a large increase of revenue and collections fell off to 84 per cent. in spite of the sale in three years of 271 estates with an annual

Second Triennial Settlement.

jama of Rs. 2,04,482.

Meanwhile the Court of Directors had refused their sanction to the proposed permanent settlement, and a settlement for one year was made in 1812-13, to be followed by another triennial settlement§, during which enquiries were to be made with a view of ascertaining what lands were in a sufficiently advanced state to admit of a permanent settlement of their revenue.

247. The one year's settlement of 1812-13 proved a failure. It brought an increase of the demand, but the people were

Settlements 1812-13.

disheartened at the constant alterations of the revenue, and many left their estates to be held *kas* by the Collectors, who either managed them through *tahildars* who embezzled the revenues, or farmed them out to speculators who rack-rented the tenants. Collections fell to 70 per cent., and the next settlement, which was for two years, added only

Settlement 1813-16.

Rs. 23,359 to the demand. Matters did not, however, improve, and only 72 per cent. could be collected, and that by selling up 108 estates with a *jama* of Rs. 60,172. At the

* For the materials for the following paragraphs I am chiefly indebted to Mr. Toyabe's "Sketch of the History of Orissa from 1803 to 1828."

† See Regulation X of 1807, modified by Regulation VI of 1808.

‡ See section 4, Regulation VI of 1808.

§ Vide Regulation I of 1813.

close of this settlement it was extended, by Regulation III of 1815, for another two years, after which yet another settlement was to be made for three years, and a conditional promise was again given that after the expiry of this period, i.e., in 1816, the zamindars of such estates as were in a sufficiently advanced condition would be given the benefit of the oft-repeated promise of a permanent settlement. The Court of Directors, however, ruled otherwise, and in a despatch of the 16th June 1815 wrote:—

There cannot in our opinion be a more indefensible proceeding than finally to decide on the rights of individuals and the interests of Government in a state of declared ignorance regarding both.

248. Accordingly, another settlement for three years was made under Regulation VI of 1816 at a slightly increased *jama*, but the people had been driven to desperation by over-assessment and mismanagement, and in 1817 the country broke out in rebellion and the revenue system was temporarily disorganised.* The revolt was soon quelled, but it had served to bring home to the authorities in Calcutta the very real nature of the discontent and grievances of the Uriyas.

Mr. Ker was sent as Commissioner of the Division, and Mr. Ewer was appointed as special Commissioner to enquire into the state of affairs in Cuttack. His report† gives a most interesting picture of the errors into which the Government had been dragged by their greed of revenue, and by their general ignorance of the resources, wants and prejudices of the people over whom they ruled. He states, as the chief grounds of complaint of the Uriya landholding and cultivating classes, the inequality of the assessment, the severity and inelasticity of the system of realising the public dues, the selling of estates in Calcutta, whereby foreign speculators and adventurers had been induced to buy them, the hardship of having to pay revenue in the restricted silver currency and the salt tax and monopoly. The deferment of the permanent settlement had not in his opinion influenced the Uriya proprietors, though it might well have caused annoyance to speculating purchasers, and he recommended a detailed enquiry into rents and rights in land to be followed by a twenty or thirty years' settlement.

The Collector of Cuttack, Mr. Trower, had about this time reported that so far from the Province being over-assessed, the revenue was susceptible of considerable increase, and had ascribed the large arrears to the perversity of the *mildgudars*. This was the accepted opinion, but Mr. Ewer, estimating the assessment at 10 annas per *bigha* of cultivated land—it must have been a good deal nearer double—writes:—‡

Perhaps the calculations attempted above may be allowed to strengthen in some measure the opinion that there is no sufficient reason to believe the district generally speaking over-assessed. The *jama* of Cuttack has, however, notoriously been fixed or at least augmented at hazard without any satisfactory ascertainment whatever of the real value and capabilities of the estates from which an increase has been levied, and in consequence of the defective information on which the Revenue authorities have hitherto proceeded, the unequal apportionment and distribution of the whole demand may have produced much of the evil of over-assessment, without any corresponding advantage to Government. I must here express my decided opinion that some grievances do exist connected with the Government demand from land, either of actual general excess, or of great inequality of assessment.

Such opinions could not fail to have weight, and in the next three years' settlement§ the *jama* was reduced by more than a lakh of rupees and during its currency only 18 small estates were sold for arrears. Further information on this head may be found in paragraphs 548 to 552 of this report.

249. Regulation VII of 1822 marks the beginning of a new epoch in the history of the Province, for while extending for five years the existing settlement—with an increase of Rs. 75,000 in the demand—it set forth the intention of Government to ascertain, settle and record the rights, interests, privileges and properties of all persons owning, occupying, managing, or cultivating the land, or gathering or disposing of its produce, or collecting or appropriating the rent or revenue payable on account of land, or the produce of land, or paying or receiving

* A full account of this rebellion will be found at pages 12 to 23 of Mr. Toynbee's History.

† Printed in Volume I of the Khurda Selections.

‡ Paragraphs 74 and 75 of his Report.

§ From 1818-19 to 1821-22 under Regulation XIII of 1818.

any cesses, contributions or perquisites to or from any persons resident in, or owning, occupying or holding parcel of any village or *mahal*. This Regulation was also silent on the subject of a permanent settlement.

At the close of the five years' settlement the proprietors' engagements were extended, and no further change in the revenue of any *mahal* occurred until the completion of the detailed measurement and settlement of its lands.

No provision was at first made for the appointment of special settlement officers or for relieving Collectors of the routine duties of their offices, and the natural consequence was that up to 1831 only Taluk Delang in Puri, and Kishnanandpur, Franch and Kakar in Cuttack, and Siari in Balasore had been settled. In that year the Board addressed twenty-one questions* to the local officers with the view of obtaining the information necessary to commencing operations more vigorously. During the next few years the large estate of Khurda and a few *mahals* in the neighbourhood of Cuttack were settled, but there was no uniformity in the system, no professional survey, and no resumption of invalid revenue-free claims, so that in 1833 when Lord William Bentick's celebrated Minute threatened to revolutionise the whole system, the Settlement was still quite in its infancy.

250. A few remarks on the subject of this Minute are necessary to complete my account of the settlement of Orissa. The Governor-General after reviewing the theories of the right of the State to share in the produce of the land and the results of past settlements proceeded to record his dissent from the principle of a detailed enquiry into private rights and interests such as was enjoined by Regulation VII of 1822. He formulated the following principles, which were submitted to a Board of experts at Allahabad and were adopted by them as the groundwork of a revised settlement law:—

1. The Professional Survey to be substituted for the Native Amin establishment.
2. The assessment to be fixed on an ascertainment in the aggregate of the cultivated area of each estate, and a general acquaintance with the advantages possessed by each village as regards fertility, position, population, and any other matters which require to be taken into consideration when regulating the Government demand.
3. The appointment in detail of the assessment so fixed to be left to the village communities or the zamindars, and the preparation of the records of lands in detail to be exacted from the village accountants.
4. The exercise of judicial powers by settlement officers to be limited to cases in which the cause of action may have arisen within the period of one year, and also to be limited to matters affecting the settlement, general questions of property being left to the Courts. The above restriction should not, however, be held to apply to claims once entertained and actually pending, or to those which may have been, when preferred, postponed to the period of the settlement, the parties having already been told that their claims would then be determined by the Collector.
5. Existing institutions to be maintained and prevailing systems of village management not to be interfered with except for special reasons.
6. All parties to be secured in the enjoyment of whatever rights and privileges they may be in possession of, or establish a claim to subject to the limitations above noted, but no new rights to be created, and all cultivators who hold as mere tenants at will, to be left to make their own bargains as heretofore.
7. The Patwaris *duties* to be put upon an efficient footing, under the superintendence and responsibility of the kanungoes and tahsildars.

These orders were sent to the Orissa officers with a view to such modifications of the law as would be necessary to give effect to them, but one and all—Mr. Commissioner Hunter, Mr. Collector Wilkinson of Puri, Mr. Collector Ricketts in Balasore, protested so strongly against the proposed changes that they were allowed to have their own way and to continue to make detailed field to fit
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sent to Puri.

251. In 1834 the first definite rules of practice were sanctioned and with the help of the new Deputy Collectors the settlement work was pushed on. Progress, however, was very slow, and by 1835 experience had shown the necessity of a professional survey, so from 1836 to 1843, the whole Province

Beginning of the Orissa Settlement, 1834—43.

was surveyed and mapped on a 4-inch scale. The survey officers in turn required the preliminary demarcation of village boundaries and the appointment of a special officer to decide boundary disputes. About the same time the resumption proceedings began, and from 1836 onwards were made *pari passu* with the settlement of the *hasilat* lands of the estates in which the tenures were included. In 1840 the resumption rules were modified in favour of the *lakhirajdars* and all previous decisions revised accordingly, without waiting for the parties to apply. In 1837 special Deputy Collectors were appointed to dispose of the resumption cases, and in 1840 a Special Commissioner, Mr. Ricketts, with the powers of a Board of Revenue, was appointed as the ultimate court of appeal in resumption cases in Orissa.

Another important advance, described by Mr. Ricketts* as "an alteration the like to which was never in so short a time attempted" was the promotion of the native Deputy Collectors from the subordinate task of making preliminary enquiries and reports to the responsible work of completing the settlement of *mahals* and making their own proposals for revenue. The experiment—for such it was—proved successful, and the native assistants amply justified the confidence placed in them, though for some time they continued to work with less rapidity and confidence than their European colleagues.

252. The procedure finally adopted for the survey and settlement from the beginning to the end of the operations was as follows:—

Procedure for Settlement.

In the first instance a special Deputy Collector was appointed in each district for the demarcation of village boundaries. His work being complete, the Survey Department measured each village, extracting the total area of cultivated, culturable and uncultivated land separately for every estate and *tahsilat*† within its periphery. They also prepared maps on a 4-inch scale showing the main physical features and divisions of the soil in the estates and villages under survey, i.e., *tahsilat*‡ appear as mere spots on the map without internal detail. On receipt of the revenue survey maps and measurements the native surveyors (*amins*) were sent to measure the village with the pole,§ which they did by starting from a fixed point and measuring the length and breadth of each field in continuous succession recording these measurements, the estimated area, the nature of the tenure, and the name of the tenant, in the field-book (*bhauria*). From the field book was prepared a statement (*warja*) intended to show at one glance all the lands held by a single tenant, and this and the field-book formed the basis of the Deputy Collector's enquiries. Armed with these he proceeded to take up the settlement of the particular estates entrusted to him.

His first care was to prepare a list of *lakhiraj* claims and to send these to the Collector to be numbered and registered, the number so given being what is now known as the 'general' number of the revenue-free lands. He then instituted suits for the resumption of all these lands and called upon the *lakhirajdars* to appear with the receipts held by them for the *sanads* filed in the Collector's office. Very great pains were taken to obtain the attendance of the claimants, but if they failed to appear the lands were resumed; if they appeared the *sanads* were sent for and examined and a decision given on the validity of the title.

The next step was to call on the *kharidadars*, *muquddams*, *sarbarahkars*, *pursethis*, *padhaus*, and other claimants of subordinate interests in the land to appear and prove their title, and while these investigations were in progress the columns for soil and crop hitherto left blank in the field-book were filled up by *amins* under the supervision of the Deputy Collector.

This done he proceeded to enquire into the real assets of the village, examining the zamindar's statement of demand and collections, the former revenue, and any other sources of information available, and comparing the rates so deduced with those of neighbouring estates and with his own ideas as to the fair assessment of the village having regard to the quality of the soil and the crops grown.

Rates being fixed and the amount of land under each class of crop known, the total assessment of the revenue-paying lands§ was easily arrived at, and

* See paragraph 70 of his Progress Report for 1837.

† See paragraph 410.

‡ *Padika*, a bamboo pole of 7 to 12 feet in length; see paragraph 124.

§ *Khadies* or *hadlat*, i.e., lands other than *lakhiraj*.

to this was added the assessment of the resumed tenures. This being done a rent roll (*bhidn*) for each estate or portion of an estate in the village was made out, showing in detail the lands held and the rents payable by *thāni* or resident raiyats, *chāndinādars* and all tenureholders and owners of resumed lands, but giving only a lump assessment on lands in the occupation of the proprietors or of *pahi* raiyats. The rates for these latter were in practice generally assumed as four annas per rupee less than those of *thāni*, which could more easily be ascertained. The proceedings were on completion of the settlement of the estate described in a vernacular report (*ruizad*) giving an account of the history, the lands, the subordinate tenures, the resumptions and the assessments and the proposals for the new revenue, illustrated by elaborate figured statements.

This, with an English covering report, was submitted to the Collector—engagements being in the meantime taken from the proprietors, tenureholders and cultivators, and leases given them in return.

The Collector modified or confirmed the revenue, altering at his discretion rents or rates of allowance, and in turn forwarded the reports to the Commissioner who passed final orders or sent the reports on to the Board of Revenue. Alterations were given effect to by a note of the change (*tarmim*) in the *ruizad*, and sometimes but by no means always a new rent-roll was prepared. In some cases—I may instance Gopinathpur Taluk—extensive alterations made by the Collector only resulted in a reduction of the revenue, neither raiyat nor tenureholder getting any of the intended benefit. While the estates were being thus dealt with the resumption proceedings were submitted to the scrutiny of the special Deputy Collector who tried any cases left pending, and if he differed from the assessing officer, referred the case for orders to the Collector who disposed of it subject only to an appeal to the Special Commissioner.

253. The settlement so made began practically in 1835 and was concluded in 1845. It cost Rs. 20,36,348 and resulted in an increase to the revenue of only Rs. 34,980.*

Results of the Settlement.

Nothing is more striking to a student of the literature of this great settlement than the disinterested zeal for the welfare of the people and the tender sympathy with their prejudices and weaknesses that is shown in every line of the letters of such men as Mills, Ricketts and Wilkinson; and the marked appreciation of their services and the deference to their opinion shown by the governing bodies in Calcutta. There was no attempt to realise the pound of flesh that might be the due of Government; the terms allowed to unsiezed *lakhirajdars* were far more lenient than the strict letter of the law enjoined, and where there was reason to suspect the revenue of any estate to be burdensome, it was unhesitatingly reduced. The great fear of the local officers was, from first to last, that they would, on the ground of expense, be compelled to revert to the aggregate to detail system of the North-Western Provinces. In his Operation Report for 1837-38 Mr. Commissioner Ricketts wrote†—I have omitted some sentences:—

In the 226 mahals reported the rights and interests of every party connected with the land have been ascertained and recorded. Undefined, intricate and confused as those interests were, their adjustment was alone worth the outlay. The more experience in the Province I acquire, the more convinced I am that the aggregate to detail system is impracticable here. The Board have seen enough of Cuttack to judge what sort of a settlement it would be if all the relative rights of *khariadars* of the first class, *khariadars* of the second class, *magdhdams*, *sirbarakhs*, and *thani raiyats* were to be left unadjusted; and I rely on their not proposing any alteration in the detail of the proceedings. It happens that I have charge of a large settled district as well as of the unsettled Province of Cuttack, and I have continued opportunities of comparing the two systems. The Midnapore district occupies more of my time than the Cuttack Province. It is Midnapore that is unsettled, and it is my belief that in several parganas of that district a survey and settlement on the Cuttack plan will ultimately be necessary.

The Board strongly endorsed the opinion thus expressed; and again in 1841, Mr. Commissioner Mills writes:—

It was agreed (at the conference) that any alteration in the present system of making the Settlement and of preparing these papers (Settlement records) was inadvisable; and

* Mr. Mill's Report of 1847. This is up to April 1845. In a statement of 9th December 1850, the nett increase is shown as Rs. 42,165.

† Operation Report, 1837-38, paragraph 102.

abounding as Cuttack does with such a variety of under tenures, I think the aggregate to detail system of the Upper Provinces could not well be introduced, and sure am I that its introduction would cause great and general dissatisfaction to the country, while, as regards the rents to be paid by the *ex-lakherajdars*, *kharidadars*, and others, who before held their lands at a quit-rent, or free of rent charges, it would in practice be found to retard the settlement operations; the settlement officers must fix the rents to be imposed on these holdings.

How completely experience has justified the contentions of these officers is obvious to any person who compares the agrarian condition of Orissa and Bengal. To the officer deciding disputes as to possession in a permanently-settled village of Bengal, the first and commonest stumbling block is the absence of any admitted basis of enquiry. In Orissa such a basis may always be found in the settlement papers, which if ever mistrusted are now at least looked to with the most unquestioning faith. Their efficacy is shown by the security of tenure of all who hold settlement leases as compared with the slow development of the rights of the *pahi* raiyats, and affords proof, if such were wanting, of the possibility of controlling and modifying the development of rights by means of a record.

The one great want was that of a cadastral map, but, owing to the system of measurement, the field-book to a great extent supplied its place.

254. The settlement was originally made for thirty years, and expired in September 1867. For two years previously the

Extension of settlement.

Province had suffered from the most disastrous famine on record, and it was thought inexpedient to attempt a re-settlement until time had been allowed it for recovery. Accordingly, Act X of 1867 was passed and continued the existing settlement to the end of the *Amli* year 1304, corresponding to the 7th day of the month of September 1867 A.D.

CHAPTER XI.

LAND TENURE.

255. In this chapter I propose to show what are the rights and liabilities

Classes of Land Tenure.

of the various classes in occupation of the land, how those rights have developed and changed during this century, and how they may in all probability be affected by the present settlement and the actual or proposed alterations in the land laws. A good deal of what is here written is necessarily repeated elsewhere in the chapters on settlements of rent and revenue, but the two subjects have been kept separate as far as it was possible to do so without too great a sacrifice of completeness.

The classes whom we find possessing, or drawing an income from, the land fall generally under one or other of the following heads:—

- (1) The so-called 'proprietors' directly responsible to the State for the revenue of the land they own, *i.e.*, *mâlguzars* or *zamindars*.
- (2) The tenureholder with quasi-proprietary rights, holding under the proprietors, *viz.*, *muqaddams*, *padhans* and *sarbarahkars*.
- (3) The revenue-free proprietors, holding their lands free of revenue in perpetuity, *i.e.*, *lâkhirâj bâhâldars*.
- (4) Holders of resumed revenue free tenures or *bâzyastidars*.
- (5) Purchasers of waste lands, now reclaimed and settled: or, *kharidadars*.
- (6) Resident cultivators, whose right to hold at a rent fixed for the term of Settlement has been recognised, *viz.*, *thâni* and *chândina* raiyats.
- (7) Cultivators who have not such recognised rights, *i.e.*, *pahi* raiyats, occupancy and non-occupancy.
- (8) Persons holding land free of rent in consideration of their services to an individual or to the community, *i.e.*, *jâgirdars*.
- (9) Under tenants of classes (4) to (8).

256. An account of the several classes of persons who under the Mogul

The landed proprietors.

and Mahratta rule were directly responsible for the payment of the revenue has been given in the preceding chapter dealing with the early history of the land settlements in Orissa.

Here I need only say that on the conquest of Orissa in 1803 the Commissioners appointed for the settlement of the Province found middlemen intermediate between the cultivator and the State and having a recognised right to the collection and payment into the Treasury of the public revenue.

In paragraph 183 I have enumerated the following:—

- (1) Ancient Zamindars or Rajas of the *Killa* estates.
- (2) Zamindars of Mogul or Mahratta creation.
- (3) *Chaudhri* and *Kanungo Talukdars*.
- (4) *Mazkuri Muquddams*.
- (5) *Mazkuri Sarbarahkars* and *Karjis*.
- (6) *Pursethis* of *Patnas*.
- (7) Holders of *Kharidugi* (purchased) lands.

To these may be added holders of the following estates:—

- (8) *Dograi mahals*, grants of land to bodies of *Dogras* or yeomen in return for their services, which had been resumed and assessed, one or two of the principal men being allowed to engage for the revenue, the others holding as their dependants.
- (9) *Nankar* and other *jagir* estates, consisting generally of scattered villages or portions of villages assigned for the support of high officials, or of friends and dependants of the sovereign.

It is not to be supposed that the rights of these very different classes were identical, but it seems clear that none of them, except only the zamindars and *khanduits* of the border, had before the British conquest any recognised proprietary right. There had, indeed, grown up a custom of hereditary succession, but cases of removal were not infrequent, and all the larger holders found it convenient to obtain a *sanad* of appointment, or say of confirmation, on succeeding to their inheritance. Their tenures were also to a certain extent transferable, but to complete the validity of the transaction, the countersignature of the *amil* or *sadar kanungo* was necessary. Further, Mr. Stirling states that, except in the case of waste lands, he was unable to discover any instance in which the sale did not purport to be made for the liquidation of balances of the public assessment.

For failure to pay their quota of revenue the *malguzars* were liable to imprisonment and to the forced sale of the whole or portions of their lands; but so long as they remained in possession they were entitled to collect all they could from the raiyats, and to take the profits arising from the assessment of waste lands and to levy tolls and miscellaneous imposts. Further, they were generally allowed a *rusum* or deduction from the valuation of the estate amounting to not less than one-twentieth of the total in land or money.

257. Much that is of the greatest interest has been written concerning the

Mr. Stirling's account of the Proprietors.

rights of these *malguzars* and I might fill my report with extracts; but it would be of little use now to go over this old and debatable ground, and I shall content myself with quoting the conclusions arrived at by Mr. Stirling as given in the 59th paragraph of his Minute*.

In discussing the real nature of the rights and privileges of the zamindars, *talukdars* and *muquddams*, according to the former sense of the country, it is much easier to say what they were not, than what they actually were. It is my decided opinion, that from the hereditary character pervading so remarkably all the institutions of the Hindus, they at all times possessed an imperfect title of property in their offices, which was distinctly admitted and recognised by the practice of the Mogul Government, as evinced by the numerous authentic deeds of sale extant, bearing the countersignature of the chief kanungo or his deputy. The following is an imperfect sketch of the functions and emoluments attaching to those offices. They had the right of collecting the Government revenue assessed on the land according to certain fixed rates, or determined proportions of the crop settled by Raja Toder Mull, whose general Settlement was unquestionably the basis of all subsequent revenue management, if not the only one known in the Province of Orissa. The *chowdree* and *kanungo talukdars* collected direct from the raiyats of the *pahikash* villages, and through the *muquddams* from the *muquddami* ones. Both classes of hereditary Collectors and Managers were maliks of the *Nafa* and *Noqsan* within the limits specified, that is, they appropriated profits or surplus collections, and in return were res-

* Pages I to LX of the Appendices to Mr. Toynbee's "History of Orissa."

possible for deficiencies, unless they could show them to be the result of some great and overwhelming calamity of season. These profits would obviously arise from persuading the raiyats to cultivate the more valuable products in preference to those on which the *jama* was originally assessed, and from encouraging the resort of *pahi* or the extension of tillage by *thani* raiyats by judicious arrangements in leasing out land that was waste, unoccupied, and uncultivated, but fit for cultivation at the period of the great general Settlement, or which had subsequently become reduced to that state. The privilege exercised of selling as well as leasing out portions of the waste and jungly, or *lugar kharij jama* land has before been noticed. The *muqaddams* sold in his own village, with the knowledge and sanction of his superior, and the *talukdar* in his tenure at large with the sanction of the sudder kanungo, and the concurrence of his colleagues. They had both a share of the sayer duties or *faroiat ruqm*, and of certain taxes on trade and artisans mentioned always in the bills of sale, as the '*Kool haboobat*' and '*Mohterta*,' likewise perquisites or tithes on fisheries, pasture grounds, gardens, woods, bamboo jungles, and the plains called *Banapat*, producing the grass universally used for thatching in this district (*Andropogon muricatum*). As far as I can understand, the resident raiyats of each village were each entitled to a share of the firewood, bena grass, etc., sufficient for their home consumption, and to graze their own cattle on plains fit for the purpose, without paying to anybody; but when a question arose as to disposing of produce to a stranger or admitting strange cattle to graze, the *talukdar* or *muqaddam* (according to circumstances) would be the *Malik* and conclude the bargain and arrangement. The above article did not, I believe in general form a part of the public assessment, unless in cases where their value and amount were considerable. They were allowed also ground for building, or *khanabari*, and cultivated certain portions of land free of assessment for their substances, the nankar of the *talukdar* being called *khovar* or *nij-jote*, and that of the *muqaddam* *pitralih*, or *cutun*. They levied further established *rusum*, the *muqaddam* from the ryots of his own village and the *talukdar* from the *muqaddams* and the *pahikash* villages. Being responsible jointly with the *khandait* and *chokoyans* for the police of the country, they must of course have derived advantages from fines, forfeitures, bribes, etc., all of which with taxes on marriage, so regularly taken under the Mahrattas as to have become an avowed impost in the revenue accounts, are rather of the nature of illicit perquisites according to the proper constitution of the country.

258. On the acquisition of the Province by the British, engagements for the payment of revenue were taken from the holders of the several classes of estates already mentioned and borne on the revenue roll of the Mahrattas; also from the holders of the small *taluks* and zamindaris only nominally included in large estates, and from hereditary *muqaddams* who for five years past had paid their revenue directly into the public treasury. To these were subsequently added the holders of lands of more than 75 acres in extent which were alleged to have been held rent free or on a quit-rent but were resumed and assessed during the general enquiry into the validity of revenue free titles. Though not expressly so stated all these persons appear to have been regarded as "actual proprietors of the land," (*vide* section VI of Regulation XII of 1805) where mention is made of "zamindars, independent talukdars, and other actual proprietors of lands."

In section IV of Regulation VII of 1822, it is declared "that it was in no degree the intention of Government to compromise private rights or privileges, or to vest the *Sadar Malguzars* with any rights not previously possessed by them;" but in fact, either purposely or owing to a misunderstanding of their true position, it appears that these collectors and payers of revenue were allowed all the rights of freehold proprietors, subject only to the liability to sale of their estates for default and to dispossession for improper conduct; and their various titles of *Chaudhri*, *Kanungo*, and *Muqaddam*, soon merged into the more honorific appellation of *Zamindar* allowed to them all under the British régime.

They have been permitted to enjoy a right of inheritance according to the Hindu law, and not according to the law of primogeniture which was in force previous to the British conquest. They have an almost unlimited right of partition; an absolute right of sale and transfer; and even on default receive the balance of the sale money after liquidating their debts to Government.

If they refuse or are not allowed settlement they still draw an income from the lands, and when they are in possession are not required to perform the police duties that formerly belonged to their office; some even live apart in other districts or provinces as mere devourers of the rent, almost without use or obligations.

* See Regulation XII of 1805, and Chapter X *supra*.

259. The incidents of the zamindar's right in a temporarily-settled estate as it has grown up under nearly a century of British rule are as follows :—

Incidents of Zamindari right.

- (1) Right to inherit according to the personal law of the proprietor.
- (2) Right to transfer the whole or any portion of the estate.
- (3) Right to partition, subject to the limitations of the Partition Law* for the security of the revenue.
- (4) Fixity of the revenue demand for the term of settlement subject only to reductions for acquisition of land by Government. No abatements or remissions can be claimed as of right for any calamity.
- (5) Right to the rents fixed in the settlement and, in villages not assigned to sub-proprietors, to all the profits of new cultivation and to the lawful increment in rents.
- (6) Right to all profits from the jungle waste, and other unassessed areas, and from fisheries in villages not assigned to sub-proprietors, subject to the prescriptive rights of the community to fuel, pasturage, common lands, and roadway.
- (7) Right to grant leases and create intermediate tenures, though such are only binding for the term of settlement.
- (8) Right to compensation for land required by Government.
- (9) Right of co-sharer to open a separate account and pay his revenue separately into the treasury.
- (10) Right to engage for the revenue in re-settlement, subject to the proviso that Government may exclude any person on the ground that his admission to or continuance in the management would endanger the public tranquillity or otherwise be seriously detrimental (section III, Regulation VII of 1822).
- (11) Right of recusant or excluded proprietor to *malikāna* (section V, Regulation VII, of 1822).
- (12) Obligation to treat ryots well and not to collect unauthorised cesses (Regulation VIII of 1793 and section 74 of Act VIII of 1859).
- (13) Obligation to give information to the police of any breach of the peace and certain cognisable offences (Code of Criminal Procedure).
- (14) Obligation to pay the revenue according to the kists prescribed (Act XI of 1859).
- (15) Liability of the estate for sale in the event of failure to pay revenue before the latest day, the balance of the purchase money after satisfaction of all demands of Government going to the proprietors (Act XI of 1859).
- (16) Obligation to maintain *patwāris* and *chaukidars* where provided for in a settlement, and where not so provided to perform the duties of *patwāris* (Regulation XII of 1817).
- (17) Obligation to supply *rasad* (Regulation XI of 1806).

260. Under the rule of the Moguls and Mahrattas the persons whom we recognised as proprietors of the soil were, in theory at least, officers of Government, responsible to it

Taxes of Land Revenue

for the revenue they collected as at the present day any tahsildar or collector of a district, and that being so, they were of course not entitled to any remission. But when there was drought or serious floods the cultivator did not pay his rent, and there is every reason to believe, as is commonly alleged, that the Native rulers recognised such calamities as a valid excuse for short payments, so that the actual collections always fell short of the full demand. When we first conquered the Province the Bengal Regulations were extended to it, and the assessment, which under the Mahrattas had included a considerable margin for remissions and deductions, became a fixed and invariable debt to be discharged to the day on pain of loss of the property. The Bengal Regulations, unlike those of the temporarily-settled western provinces, recognise no claim to remissions on the part of the *mālguzārs*, and Orissa is a province peculiarly liable to suffer from the extremes of drought and flood.

* Act VIII(BC), of 1876 as amended by Act V(BC), of 1897.

The consequences of the attempt to engraft the rigid administration of the permanently-settled Province on a country and people wholly unsuited to it, how one after another the estates of the oldest families of Orissa were sold up and passed into the hands of Bengali adventurers, how even these failed to meet the revenue demand, and collections fell as low as 65 per cent. and the paiks rose in rebellion, has already been described in paragraphs 243 to 248. In later years the Government was more liberal; in 1834-35 Rs. 1,80,942 or an eighth of the total revenue was remitted on account of floods*. In 1836-37 a severe drought desolated the Province and Rs. 4,52,432 was remitted. In 1837-38 a similar calamity occurred causing a further remission of Rs. 5,87,146. In 1842-43 the Province a third time suffered from an early cessation of the periodical rains and Rs. 4,86,625 of the revenue was remitted. Mr. Commissioner Mills gave it as his opinion that under the just and liberal terms of the Settlement of 1837 zamindars ought to bear all ordinary losses, but that where damage was extensive, it would be ruinous to the sufferers to refuse remissions commensurate with the injury sustained. He strongly deprecated suspensions of the demand, urging the advantages of absolute remissions to the extent of even a fourth of the loss sustained. After this was written the remissions down to 1866 were not so large as in the years already referred to, but altogether in that period of thirty-six years upwards of 45 lakhs or three years' revenue was remitted, as shown in the following statement:†—

	CUTTACK.		PURI.		BALASORE.	
	No. of years.	Total amount.	No. of years.	Total amount.	No. of years.	Total amount.
		Rs.		Rs.		Rs.
For inundation	... 8	8,08,876	24	5,39,619	14	6,25,814
For drought	... 5	11,25,006	6	5,35,736	9	6,18,660
	—	—	—	—	—	—
Total	... 13	22,33,882	30	10,75,355	23	12,44,504
	—	—	—	—	—	—

Since 1866 no remissions of land revenue have been made, though certain sums have been written off in the Government Khas mahals; e.g., from 1884 to 1897 remissions in the Khurda Khas mahal amounted to a little over 4 per cent. per annum, the annual demand being less than 3 lakhs. Probably there has been no such urgent necessity for relief, the resources of the province having largely increased while the land revenue remained stationary, and at the same time the construction of canals and the improvement of the embankment system must have greatly decreased the liability to injury from the vicissitudes of the season, in Cuttack if not in the other districts.

When the form of *kabuliyat* was under consideration the question was raised whether it would not be well to make some special legislative provision for temporarily-settled areas in which the relative incidence of land revenue is naturally higher than in permanently-settled Bengal. It appeared, however, very doubtful whether any condition whereby zamindars should be debarred from collecting rents for a particular period would be acceptable to or observed by them, and in a letter No. 3429, dated the 20th November 1897 from the Government of Bengal to the Secretary to the Board of Revenue it was ruled that suspensions and remissions should be entirely in the option of Government, and granted when necessary, as of grace. These orders are embodied in clauses 2 and 5 of the *kabuliyat*, which are as follows:—

Clause 2.—I hereby admit that I have no right or claim to any abatement of revenue on the ground of inundation and drought or other calamities of season.

Clause 5.—I recognise and admit that Government has the right to maintain or abandon any public embankments or drainage works upon my estate or on neighbouring land, and that

* Figures from Mr. Mills' Note of 1847.

† See Report of Committee on Inundation of 1857.

payment of the land revenue of my estate is not to be dependant upon such maintenance or to be affected by such abandonment."

261. It is to be noted that it is only in villages or portions of villages in the direct possession of the zamindar, *i.e.*, *hastabud*, that he can claim rents on newly cultivated lands. In villages in the possession of sub-proprietors, *i.e.*, *muqaddams*, etc., the latter have the right to all the profits from waste lands. The right is declared in clause 6 of the *kabuliyat*.

262. The profits from waste lands include those from surface quarries, or from brick making, lime-burning, etc., but do not include the right to metals that are mined. There has been a good deal of doubt and uncertainty as to the respective rights of the Government and the land owners to minerals in Bengal. In Orissa there are no mines, and the profits from sandstone and laterite quarries have been allowed to zamindars; but it has now been authoritatively decided by the Supreme Government that the right to minerals in all temporarily-settled areas belongs to Government, and this decision has been embodied in the *kabuliyat*, limestone and laterite being expressly excepted. The Clause (No. 7) runs—

I admit that Government has the right to all minerals in my estate, including laterite and limestone, and that in case minerals are found Government is entitled to them and to right of way, and to all other reasonable facilities for working and carrying away such minerals.

263. The zamindar has the sole right in his *hastabud* villages to the sale of timber on uncleared lands, but the resident tenants have in general a prescriptive right to take for their own use firewood in scrub jungle, and grass for thatching, and to graze their cattle upon some or all of the waste lands of the village (*vide* paragraph 474 *infra*).

In most estates this right is admitted, but this has not always been the case, and the National Society of Bulasore have raised objections to the record made in this Settlement of the rights of the community, and so long ago as 1821 Mr. Stirling wrote in paragraph 79 of his Minute, that one of the evils consequent on the recognition of the proprietary right was that the great zamindars had pretty generally assumed the whole produce of the jungles, the thatching grass and the grazing grounds to be their exclusive property, and refused to allow the resident raiyats of adjoining villages to share in these natural advantages. There is, however, abundant evidence that the right existed, and if in some villages it was not exercised this was because the zamindars were strong enough to withhold from the tenants their customary privileges. We have therefore set apart and exempted from assessment lands whereon the tenants of a village may graze their cattle without let or charge, and also a bit of common land for the cremation or interment of the dead. These lands have been protected by clause 6 of the *kabuliyat*, which runs as follows:-

I hereby bind myself to preserve as grazing grounds, cremation grounds, and reserved tanks the plots specified in the schedule hereunto annexed, and not to allow any person to cultivate such plots or any portion thereof; and I will not collect any rent on account thereof so long as this lease continues in force. I also bind myself not to collect any money as grazing charge in respect of any of the aforesaid plots and to take action in the Courts to eject trespassers from the plots hereby reserved, if the Collector require me to do so.

It is to be understood that this provision is not intended to deprive the proprietors of the right to take payment for the grazing of cattle of other villages on these or other pasture lands. In some estates a considerable income is derived from the herds of buffaloes brought to graze on the *pālānda* lands, though these are of greatest value in the permanently-settled estates on the sea coast. In the *bhils* of Tikan and Kalamatia the practice was so general that it was thought fit to assess the profits, but as a rule the policy has been to ignore all rent charges for grazing. The right of the zamindar to the fruit and timber of trees on leased lands is discussed in treating of tenant right, paragraph 342 of this chapter. The right to thatching grass on the prairies (*benapat*) is a frequent cause of disputes between landlords and tenants; the former find it more profitable to keep the land under grass, for which there is always a large

* See also paragraph 661 and Appendix A as to the form of *kabuliyat*.

demand, while the tenants naturally want possession of the land, as it is easily reclaimed and generally fertile, and then they plough and sow without permission until the zamindar intervenes and they find themselves in the civil or criminal courts.

264. It is doubtful whether under Mogul or Mahratta rule the zamindars of the plains had any right to create permanent intermediate tenures between themselves and their raiyats. Mr. Stirling says in his Minute that he doubts the existence of *muqaddams* appointed temporarily by zamindars except under our Government; and certainly such cases were very rare, though in Taluk Bisanabar at least Mr. Mills has recorded that the *muqaddams* were created by the zamindar. The latter tried to make out that the tenures were not really *muqaddami*, but the decision was against him. *Sarbarahkars* were more commonly appointed, but they were in their inception of the nature rather of collecting agents or farmers than of permanent tenureholders. *Kharida* tenures, on the other hand were created by sales of waste lands which were *ex hypothesi* untenanted before.

The early regulations limited the term for which tenures might be created to ten years (Regulation XLIV of 1783). This rule was abrogated by Regulation V. of 1812, but by the very nature of a temporary settlement any under-tenure could only be valid as against Government for the term of the settlement and sections 191 and 192 of the Bengal Tenancy Act recently extended to Orissa expressly reserve the power of assessing at a fair rent, on re-settlement, any tenure created by a zamindar in a temporarily settled area. Such tenures were, under the regulations, voidable on sale for arrears of revenue, and under Section 52 of Act XI of 1859, the purchaser of an estate now acquires it free from all encumbrances imposed upon it after the time of Settlement with certain exceptions.

This section indeed goes so far as to provide for the annulling of agreements with raiyats if made since the settlement, and for taking a higher rent in cases where persons held their lands under engagements stipulating for a lower rent than would have been justly demandable. This would enable the purchaser to resume all rent free or quit rent grants not recognised in the Settlement.

265. The zamindar was originally a representative of the ruling power and by no means the last of his duties was to keep the raiyats prosperous and contented; that this was so is clear from the following extracts of *sanads*, taken from those printed with Mr. Stirling's Minute:

Obligation to treat raiyats well and not to collect unauthorised cesses.

Sanad of appointment of Chaudhri.—Since we have appointed you to the above *khidmat* (service) of Chaudhri. it is ordered therefore that you adopt measures for extending the cultivation of the lands, keep the raiyats prosperous and contented, and discharge without fail the revenue of the Government.

Sanad of appointment of Wdlati Kanungo Talukdar.—He must in future discharge all the duties of his station faithfully, pay regularly the revenue of the several villages kist by kist, keep the raiyats happy and contented, so exert himself that the signs of improving cultivation become daily more and more perceptible, take care that *zerai* land shall not fall out of cultivation nor inferior products be sown in the place of the more valuable ones, and should any thefts or robberies occur he will assist in tracing out the offenders and recovering the property; he will also abstain from levying *abacals*.

Sanad of appointment of Zamindar Muqaddam.—It will be the duty of the aforesaid grantee to discharge the duties of his office with honesty and fidelity, to keep the raiyats prosperous and contented, to exert himself in improving the lands, not to suffer productive land to become waste, not to attempt to bring into cultivation ground that is utterly unfit for tillage, to pay the public dues regularly according to *khidmat*, to appropriate to himself whatever profit may result from the management of the zamindari and *muqaddam* in question, and to respect the *derectar*, *brahmottar*, *khurat*, and other rent-free tenures which have existed from ancient times.

Such were the duties of the old *talukdars*, and the proclamation of 15th September 1804 expressly continued to them the same responsibilities and provided that all authorised *abwabs* should be incorporated with the land rent and that nothing but what was there expressed should be taken.

This has ever since been, and is still the law, though there are most discrepant rulings as to what are authorised and what are not authorised cesses.

Collections on account of markets, ferries, etc., are not *abwabs* though they probably come under the head of *Sair* and are as such forbidden by Section XXXI of Regulation XII. of 1865. In the following paragraphs I deal with the collections other than rent made by landlords from their tenants.

266. The cesses recognised by law are (1) Road cess at 2 pice per rupee; (2) Public works cess at 2 pice per rupee; (3) Zamindari dāk cess at 1 pice per rupee. These cesses are paid by the zamindars who under Act IX (B.C.) of 1880 are entitled to recover half an anna in the rupee from their tenants and under Act VIII (B.C.) of 1862 as much of the dāk cess as tenants agree to pay. In fact they collect more, and an attempt has been made in this Settlement to ascertain the amounts actually taken in different forms.

It is difficult to make any general statement as to the amount of the illegal collections. They vary from district to district, from estate to estate, and from village to village; indeed, one may almost say that they vary from raiyat to raiyat, for the weak will pay when the stronger do not. For the district of Puri Mr. H. McPherson gives the following account of the exactions recognised :—

The most common forms of exaction were the following :—

Road and Public Works Cess, collected at higher than authorised rates.—The raiyat should have paid six pice on the rupee of rent. The contribution varied from six pice to two annas per rupee.

Zamindari Dāk Cess was similarly levied from raiyats instead of being borne by the zamindar.

Sana Salami or Bhati.—A present of usually one rupee per village made to the zamindar or *muqaddam* on New Year's day (August-September).

Dakhal-Khary Rasm.—A mutation fee for record of name on transfer of holding, calculated usually on the amount of consideration money as a rule As. 2 per rupee in *thani* land, As. 1 per rupee on *pahi* and *lakhiraj* land. This if confined within these limits is not an illegal cess, but if the charges are more extravagant, the mutation fee really becomes a form of extortion.

Chandan Jatra Kharcha or Gaudi.—A cess of three pice per rupee of rent levied by the zamindar to meet the expenses of the *Chandan Jatra*.

Patila Paban Kharcha.—A similar cess of two annas per house levied at the *Doljatra* in the southern Parganas.

Purama Kharcha.—A levy in kind made from the goala caste every full moon—usually one-eighth seer of *ghee*.

Bibha Tawani or China or Magin.—A present levied by the zamindar on the occasion of marriage ceremonies, said to be taken also at funerals. When taken in cash, it is usually As. 8 for a son, As. 6 or As. 4 for a daughter. When taken in kind, it consists of varying quantities of betel leaves and nuts—usually 100 of the former and 10 of the latter. The *Hatai* (merchant) class give instead one or two cloths.

Bisodhani.—A fee paid by the raiyat at the time of getting acquittance receipt for the year's rent. The fee varies from three pice to one anna per rupee of rent. It is usually paid at the November kist collection. *Kharada panti* and *Gomastah kharch* do not seem to differ much from *Bisodhani* except that they are taken at both kists and are usually less than the *Bisodhani*.

Pati Kharcha.—A similar exaction to the above, usually of three pice per rupee of rent made nominally to cover the cost of maintaining collection peons.

Rota Kharch is still another name or another form of the *bisodhani* imposition.

Sair or "Extras," is the expression sometimes used to cover all the foregoing excess collections, but it in some cases denotes the addition taken to cover interest on arrears of rent; arrears are often charged at 25 per cent.

In addition to the above, the zamindar has many other ways of aggrandising himself at the expense of his raiyats. When he constructs a small irrigation *bundh* for them, he levies more than the cost by a cess which he calls "*Pankar*" or water rent. When he allows a raiyat to break up new land he takes in advance a "*patta salami*." When the amount is small, say Rs. 1 per acre, the transaction is of no importance. If it is large, it really takes the place of rent. It came to light in the *dehna* tract of the Sar lako that the *salami*, thus *contract* levied was Rs. 1 per acre. In no other part of the district did there seem to be ground for suspecting that true rents were being concealed under this disguise. In the *dehna* tract of resettlement the amount of road and public works cesses has been clearly noted below the rent, and it has been declared in the margin that the zamindar has no title to collect more than the total thus made up. How far the record will protect the raiyat from illegal exactions remains to be seen. The raiyat during re-settlement operations has received a sound education and acquired an acquaintance with his rights that he has never before possessed. It is to be hoped that the way of the despotic zamindar has at least been made more difficult.

Abwabs in the Cuttack District.

In Cuttack the exactions may be grouped under three heads:—

- (1) Lawful cesses collected at unauthorised rates.
- (2) Cesses connected with the granting of rent receipts and forming one of the perquisites of the collecting agency.
- (3) Miscellaneous collections on special occasions.

First, *Road and Public Works Cess*.—This is lawfully recoverable at the rate of six pies per rupee of rent from raiyats; at one anna per rupee from rent-free holders, and at intervening rates from tenure-holders. In practice it is generally recovered at one anna the rupee from all tenants, except in the estates of the larger zamindars. Where it is taken at more than one anna per rupee it generally includes zamindari dak cess and other unspecified *abwabs*.

Second, *Zamindari Dak Cess* or "*dak dehati*." This is levied from zamindars at the rate of one pie per rupee of rental to pay for the carriage of letters in the mufassal, and is not legally recoverable from the raiyat except with his consent. In practice, it is generally collected from the raiyat either separately or else as part of the road and public works cess.

The following table, compiled from some of the completion reports, shows how great the variation in the practice is:—

PARGANA	ROAD AND PUBLIC WORK CESS RATE PER RUPEE †				Zamindari Dak Cess how levied.
	From		To		
	As.	P.	As.	P.	
Asureswar	0	6	0	6	} Not collected.
Ahyas	0	6	0	6	
Benahar	1	0	2	0	Included in road cess
Beruan	1	0	1	0	Three pies.
Bahubisi	0	6	0	6	Nil
Dalijora	0	6	0	6	Three pies.
Dolgram	1	0	1	0	Included in road cess.
Kodinda	0	6*	1	0	Generally included in road cess
Kuhunda Jajpur	0	6	1	0*	
Hariharipur	0	6	0	6	
Paina	1	0	1	0	
Katia	0	6	0	6	Three pies.
Tisana	1	0	1	0	
Karimul	1	0	1	0	Six pies
Kanchikhand	0	6 †		†	
Tappankhand	0	6 †			
Tilau,	0	6	0	6	
Chaudakulat	0	6	0	6	

Of the cesses connected with the collection of rent the most common are —

- (1) *Kharrapani*.—A payment of one to two pie per rupee of rent made to the *gomasta* who grants *pauti* or receipt. This is almost universal, and forms a large part of the remuneration of the collecting agency.
- (2) *Bisodhani*.—A payment of a few annas for the *bisodhan* or acquaintance in full; not very common.
- (3) *Kist Khilat Siwai*.—A collection as six annas per rupee on arrears. This is not common, as no interest is usually charged on arrears; it is mentioned in Beruan only.
- (4) *Dala*.—At one anna per rupee for payments made in copper. It appears to be almost obsolete.
- (5) *Piatu Kharcha*.—Generally a pie per rupee, payable to the peon sent to collect arrears. It may be regarded as a process-fee and is very general; it does not however find any place in the accounts.
- (6) *Magan*.—Taken on payments of produce rent. Recorded in Chaudakulat at 3 seers per *bharan* of paddy.

* The higher rate is generally for *ba-gasti* lands only.

† At one anna for *ba-gasti* only.

The following abstract from the completion reports shows the amounts ascertained to be collected:—

PARGANA.	Kharrapani.	Bisodham.	Paada Kharcha.
Asureswar ...	2 pice per Re. 1	... ..	.....
Beruan ...	Ditto	.....	.....
Balubisi ...	Ditto	on pice (<i>panti</i> <i>kharcha</i>).	.....
Dolgram ...	.....	1 anna to 4 annas.	.....
Katia ...	(<i>Fard Shikar</i>) 2 pice per Re. 1.	...	.....
Hatimunda ...	1 to 2 pice per Re. 1.	4 annas	.....
Kuhunda Jaipur .	1 pice per Re. 1	.....	... .
Kodinda ...	2 pice per Re. 1	.....	1 pice per Re. 1.
Hariharpur ...	Ditto	.....	... ..
Kato ...	Ditto	.....	.....
Karimul and Padam- pur.	Ditto	.....	.....
Keraulkhard and Ranchikhard	Ditto	.....	... ..
Tappunkhard ...	Ditto	.....	.....
Tikun-Chaudakulat	1 to 1½ pice per Re. 1.	.....	2 to 6 pice.

Miscellaneous Collections.

(1) *Sunia Bheti* or *Sunia Salami*.—This is a payment to the zamindar on the first day of the agricultural year. It is made generally by the well-to-do raiyats, and the manufacturing and artisan classes, and consists of a small payment in money or kind in return for a feast given by the zamindar. A well-to-do *thani* raiyat may pay from one anna to two rupees; the sweetmeat-seller will give sweetmeats, the cowherd a dish of curds, the blacksmith a knife, the sweeper a basket, and so on, each after his kind. In some parts, again, the villagers club together and make a lump payment, but this is not common. The practice is very general, but the amount and form of payments varies from estate to estate and from village to village; indeed, it is hardly a compulsory payment anymore than a Christmas box or an Easter egg, but rather a present to retain the goodwill of the landlord.

(2) *Bahachina*, *Bibahapan* or *Bibahataina* is a present to the zamindar made on the occasion of a wedding in the *hatua* or trading classes, and sometimes in the lower class of cultivators, in return for which the zamindar presents them with the firewood that they require. The amount varies very widely—in Pargana Kate we find four annas paid by the bride's father and eight annas for the bridegroom; in Kodinda the payments are from eight annas to one rupee; in Katia as high as Re. 1 to Rs. 4 paid only by bridegrooms of the *hatua* class; the same in Tisania and Dolgram; in Karimul and Padampur as high as two rupees eight annas for a son, and one rupee four annas for a daughter.

(3) *Kuanar Purnima*.—A payment in kind of the same nature as the *Sunia Bheti*, made on the first full moon after the *Dasahara*.

(4) *Hari Kharcha*.—Four annas to one rupee per tenant to meet the expenses of religious festivities.

(5) *Holi Jalra*.—At one pice per rupee of rent for the expenses of the *Holi* festival.

(6) *Rasad Kharcha*.—At one pice per rupee to meet the expense of finding supplies (*rasad*) for any high official touring in the neighbourhood.

(7) *Mugm* or *Muthout* or *Chanua*.—Subscriptions or cesses levied for special purposes. Such are taken on the occasion of the zamindar's wedding; for the founding of a school; for the promotion of an agricultural show. In fact, it may be said that, with a few honourable exceptions, whenever a zamindar comes forward with a liberal subscription to a public fund the raiyats contribute towards it in the form of a special cess.

(8) *Hatkar*, or market dues, form another source of income, though these will hardly come under the head of *alwals*. Generally a zamindar farms out the *nat*, but if he does not he realises a small ground rent from any merchant

with a permanent shop, and also takes a handful of grain from each purchaser and a few pice on every sale of livestock or merchandise.

(9) *Mutation Fees* are commonly taken on the occasion of all changes of tenancy. In the event of sale I find that in Kodinda the vendor pays a *salami* of a couple of rupees, while the vendee in the case of a *thani* or *pahi* holding pays one-fourth of the purchase money to the zamindar. Generally Re. 1 is the least amount taken on any sale, and the new tenant has to make good all outstanding arrears before he obtains recognition. A fee called *patta salami* is generally collected as premium on every new lease of land.

(10) *Embankment Cess*.—This is collected in Sailo at one pice per rupee for the maintenance of the zamindari embankments. I am not aware of its being taken in any other pargana.

It is in Balasore that these extra collections are most prevalent, and have probably prevented the rise of the rents up to the level they would naturally have reached.

Abicals in Balasore.

Mr Kingsford in his report estimates the total of the regular cesses at four to five annas on the rupee of rent, while powerful zamindars are able to extort about two annas more per rupee in the form of extraordinary demands, and their tendency is to increase, the imposition of a new cess being attended with less difficulty than the enhancement of rents. He instances the following regular demands:—

- (a) *Road and Public Works cess* is realised nearly always at the rate of one anna in the rupee, and sometimes one-and-a-half annas are taken on this account and three pice per rupee of rent as *dâk* cess. The legitimate demand being only six pice, the result is that the tenants defray the whole of the cess.
- (b) *Bisodhani*.—This is paid at the rate sometimes of six pice, but generally of one anna for the holding on receipt by the tenant of a *bisodhan* or quittance in full for the year's rent. A portion of this fee goes to the *amla*.
- (c) *Bibâhachina* or *Bahâchima*.—A marriage due paid by the father of the bride or by the parents of both parties separately. The amount varies, but the father of the bridegroom is generally mulcted from Rs. 2 to Rs. 4, and the father of the bride from Re. 1 to Rs. 2. Some *mahâprasad* and betelnuts accompany the fee. Sometimes the better class pay the due in cloths and eatables only, and occasionally they are altogether exempted. The due is in reality a description of registration fee and ensures that the zamindar will not deny knowledge of the marriage in a possible dispute regarding inheritance.
- (d) *Sunabheti*.—Paid on the first day of the year as an acknowledgment of the zamindar's authority. It varies with the raiyat's circumstances. *Thani* raiyats and collecting *sarbarahkars* pay sums varying from two annas to several rupees, while to the zamindar they offer presents, the Brahman a pair of threads or a cocoanut, the blacksmith a knife, the Teli some turmeric, and the chaukidars and cultivators fruits and vegetables. The zamindar, however, gains little profit on this occasion, since he has to distribute cloths to his servants, to feed the villagers and to hold an expensive *pûja*. In some estates the fee has been commuted to a cash payment made with the rent.
- (e) *Mâgan*.—These are miscellaneous subscriptions raised for meeting various expenses of the zamindar, and include *Bibâha-mâgan* for marriage in his family, *karma mâgan* for a funeral, and *Mâgans* for the festivals of *Durga Pûja*, *Dol jatra*, *Chandan jatra* and *Rahas jatra* or for the purpose of erecting a shrine. This due varies from three pice to four annas per rupee of rent or per acre of land, or from eight annas to Rs. 2 for every plough, according to the caprice of the zamindar, but cases occurred before the present settlement operations of sums varying from Rs. 5 to Rs. 10 per acre being realised.

A list is always drawn up showing the amount which each tenant is to pay.

- (f) *Salāmi* or *Nazarāna*.—These are impositions for which any pretext suffices. A *salāmi* called *Paria Uthia* or *Charbast* varying from Rs. 2 to Rs. 10 is paid by a tenant desirous of cultivating new land. Another is exacted when the zamindar first visits his estate or comes to it after a long interval, or when the raiyat pays his first visit to the landlord or invites the latter to his home. A tenant who has bettered his circumstances and perhaps returned from Calcutta with savings is not allowed to enjoy them without purchasing the complaisance of the zamindar. The domestic servant returning from Calcutta to his home on leave is always bled to some purpose. These *salamis* vary in amount from eight annas to Rs. 50 and more, according to the circumstances of the tenant and the strength and capacity of the zamindar. The latter never travels in an extensive zamindari without recouping himself for much more than the expenses of his journey. I have been told by an eye-witness of an Uriya zamindar visiting Calcutta and holding a *lévee* of the coolies and *sardars* from his estate at work in Calcutta. Each *sardar* was called on to pay Rs. 10, while one rupee was taken from every coolie, and to add dignity to the ceremony it was insisted that the payments should be enclosed in purses and presented finally by the *sardars*. Where a tenant's circumstances have so far improved that he is able to build himself a house in exchange for a hut, he is not allowed to do so without some method being devised by his zamindar for exacting a fine upon his property. Thus in one case when the house had been duly built, and the neighbours and Brahmans invited to the occasion of house-warming (if such a term is applicable in this country), the landlord issued orders to the Brahmans that they were not to attend; but the absence of these honoured guests would have robbed the function of all ceremony and state, and sooner than undergo such a mortification the tenant by a donation of Rs. 50 to the zamindar secured the withdrawal of the obnoxious order. Lately a certain influential zamindar proposed, it is said, to procure a elephant, and his tenants, were mulcted in Rs. 700 towards the cost of the purchase. It is not stated that every zamindar practises these extortions; they vary in proportion with his ability to exact them and his power of inflicting punishment for refusal. The methods of dealing with refractory tenants exhibit both brutality and ingenuity. Besides being rendered subject to the attention and touch of low-caste peons, they are declared *niāpānikand*, that is, debarred from fire and water, which no villager may supply to them without incurring the zamindar's displeasure. They are denied the aid of the village servants, and can obtain neither the *dhoba* to wash for them nor the *bhandari* to shave them. It is not surprising that they usually end in purchasing comfort by submission to the demand.
- (g) *Dakhil Kharij* or *Mutation*.—The fees have been already noted in paragraph 161, *supra*.
- (h) *Tahasil Kharcha* or *Tahari*.—A fee varying from half an anna to two annas in the rupee of rent, levied annually for the maintenance of a collection staff.
- (i) *Piyadamiadi* or *Talabana*.—Varying from one-and-a-half to three annas *per diem* and realised from a tenant by the peon sent either to demand rent or to summon him to the zamindari *cutcherry*. A portion of this fee goes to the pocket of the peon, and it varies with the number of days he is engaged.

Very often a peon goes each day to a raiyat's house to demand arrears, and when the *talabana* thus reaches a considerable sum a portion of it is remitted.

- (j) *Jarimána*.—Petty cases are often enquired into and disposed of on complaint by either of the parties or by agreement between them to refer the matter to the zamindar. A fine varying in amount is inflicted on the aggressor; I believe a number of cases are thus disposed of and in many respects this jurisdiction of the zamindars is of service. The fines inflicted often reach a considerable annual sum.
- (k) *Patsala Kharcha*.—To defray the cost of maintenance of a school at the zamindar's residence, generally three pies per cad.
- (l) *Nách Sálumi*.—To enable the zamindar to keep a party of *nautch* girls, the same amount.
- (m) *Raháddri* is the cost of sending remittances to the Treasury under escort; the same amount.
- (n) *Thani Kharcha* paid by the *thani* raiyats as a fee to retain the services of the *gumashta* and *amin* for the purpose of remeasuring his holding or laying down the boundary. This amounts to two or three annas per holding.

To some of these cesses there is no great objection; a tenant is more likely to get a receipt punctually if there is a fixed small payment to be made for it, and the giving of occasional presents to the zamindar tends to preserve amicable relations. In some cases the *kharcha* is really a part of the rent devoted to a particular purpose and has in this Settlement been incorporated with the rent as provided by Regulation XII of 1805. Rents have in the present Settlement been fixed at what it was thought right that the tenants should pay, and for the future it is undesirable that any *abwabs*, except perhaps the fee for rent receipts [and the *sunia-theli* should be allowed. Clause 3 of the *kabuliyat* deals with this part of a zamindar's obligation, and runs:—

I hereby bind myself to respect the rights of all tenure-holders, under-tenure-holders raiyats, under-raiyats, and other tenants as recorded in the settlement papers, and not to collect from them any higher rents than those recorded in the present settlement proceedings otherwise than after legal enhancement.

267. The *patwari* or village accountant (the *Bhoi* of the early Hindu period)

Obligation to maintain in *patwari* was, etc. was once a recognised member of the village community and was paid by a grant in land. He was a subordinate of the Pargana officials to whom he submitted his returns, and when the officials became proprietors the natural tendency was for the *patwari* to lapse into the position of their servant.

As early as 1803 regulations were made for the better control of these village accountants, and Regulation XII of 1817 defined their position and duties, and made full provision for their appointment and dismissal. The principle of *laissez-faire* in all that concerned the domestic and social economy of the people led to a neglect of the *patwari*, and by the time of the last settlement it would appear that the *patwaris* had come to be the zamindars' servants, and were grouped by estates rather than by villages. At the last settlement the principle followed was in large estates (paying more than Rs. 500 as Government revenue), to allow a grant of land for the maintenance of the *patwari*, but in small estates all *patwari jagir* were resumed and the zamindar left to make his own arrangements for the maintenance of a *patwari* under Regulation XII of 1817. The result of these orders was that, except in a small number of the larger estates, *patwaris* ceased to exist; little use was made of those who survived, and the power of making zamindars submit the returns prescribed for *patwaris* (section 30, Regulation XII of 1817) was scarcely used at all. The obligation, however, remains, and though the present settlement has removed the last of the existing *patwaris*, care has been taken to recapitulate in the *kabuliyat* the zamindar's obligation to file papers when called upon. The clause runs:—

I hereby engage to file in such public office as may be prescribed, any measurement, collection, or zamindari papers that may be from time to time called for from me by the

Collector, or by any officer duly empowered under the rules framed by the Board of Revenue for the maintenance and correction of survey and settlement records: and to obey all the instructions contained in these rules without any objections so long as this lease continues in force.

268. For failure to pay the revenue demand kist by kist the former remedy was a personal one by a warrant (*dastak*) against the person and property of the defaulter, and long after this practice had been declared illegal it continued to be commonly employed in Orissa. Under the present law, however, the estate is hypothecated for the revenue and for failure to pay is liable to sale out and out under Act XI of 1859.

For other breaches of obligations there are two possible remedies, either exclusion from engagement, or, if the breach is also a breach of the criminal law, prosecution in the criminal courts.

The dispossession for notoriously bad conduct and the exclusion from engagement of dangerous characters appear to be contemplated by clause 2 of the Proclamation of 15th September 1803, and by section III of Regulation VII of 1822, but I am not aware that these provisions have ever been used except in such extreme cases as that of the rebellion of the Raja of Khurda, and the provision in clause 11 of the new *kalubiyat* appears to go beyond anything contemplated by the framers of these regulations. It practically places the proprietors in the position that they occupied before the conquest, but is of course intended to be used with the very greatest moderation and to provide the executive authorities with an ultimate power of compulsion, if a zamindar deliberately persists in riding rough-shod over his obligations. The clause runs as follows:—

On breach of the above conditions, or on failure to perform any of the duties imposed upon me by the above ten clauses, I hereby acknowledge on behalf of myself, my heirs, and representatives that, in addition to any other penalties to which I may be liable, the Collector may, with the sanction of the Board of Revenue, take my estate under *khas* management and pay me *malikana* as provided in sections III and V, Regulation VII of 1822.

269. The number of temporarily-settled estates in the Province is shown in the following table:—

NAME OF DISTRICT.	From Rs. 0 to Rs. 10.		Rs. 11 to Rs. 50.		Rs. 51 to Rs. 100.		Rs. 100 to Rs. 1,000.		Rs. 1,000 to Rs. 5,000.		Rs. 5,000 to Rs. 10,000.		Over Rs. 10,000.		Total.	
	No.	Revenue.	No.	Revenue.	No.	Revenue.	No.	Revenue.	No.	Revenue.	No.	Revenue.	No.	Revenue.	No.	Revenue.
	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Cuttack	981*	Rs. 5,200	1,487*	Rs. 17,512	594	Rs. 42,854	1,204	Rs. 3,81,608	180	Rs. 3,07,542	22	Rs. 1,53,314	5	Rs. 1,08,608	4,448†	Rs. 10,99,415
Balasore	140	796	383	10,540	238	17,550	523	1,62,713	101	2,08,562	15	1,15,617	4	1,15,617	1,412‡	Rs. 6,24,607
Puri	40	311	106	3,011	78	6,085	211	64,483	37	74,504	3	13,650	5	2,15,604	486	Rs. 3,76,684
Total	1,161	6,307	1,974	31,063	910	66,489	1,936	6,08,804	314	6,50,608	39	2,75,584	14	4,40,827	6,346	20,06,650
<i>Khas Mahals</i>																
Cuttack			1	38		1	109								3	140
Balasore	0	23	1	13	4	344	1	337	2	3,298			1	31,467	18	33,373
Puri			1	48		1	603	1	4,174						3	4,884

* Excluding 2 petty *Bahal Tank* estates Tauri, Nos. 1482 and 1483, the revenue of which is Rs. 16 and Rs. 4, respectively.

† Excludes *Killas Ragri*, *Chauspara* and *Balarampur* in Cuttack and *Killas Ambo* and *Mangalpur* in Balasore. Under the orders of Government contained in Government orders No. 1482, dated 5th April 1900, and No. 4167 E., dated 15th May 1900, these estates have been assessed to the following sums as Revenue, viz., Ragri at Rs. 1545, Chauspara at Rs. 697, Balarampur at Rs. 1,453, Ambo at Rs. 440, and Mangalpur at Rs. 1,130. See paragraph 610 for an account of these *killas*.

‡ Excludes one estate in Ankura which is wholly waste and pays no revenue.

The average size and the average revenue of an estate in each of the three districts is:—

DISTRICTS	Area in acres.	Revenue.
	Ra.	Ra.
Cuttack	263	247
Puri	1,079	777
Balasore	678	442
Average	417	331

The estates are therefore largest in Puri and smallest in Cuttack.

In Puri, large estates with a revenue of over Rs. 10,000 occupy more than half the area; in Cuttack they form but a tenth of the total, and in Balasore

rather more than a sixth; while the number of small *kharidagi* and *maskuri* estates with a revenue of less than Rs. 100 is much larger in Cuttack than in the other two districts.

Division of estates.

270. Originally the revenue-paying unit was the *Bisi*, corresponding more or less to the present Pargana.

Under the Muhammadans the Pargana was divided into the *taluks* of the principal officials and alienations by *talukdars* and grants by the ruling power added largely to the number of estates. The process of disintegration proceeded still more rapidly under the Mahrattas, and at the British conquest the number of revenue-paying units was 2,361. The English Government recognised the right to partition of estates, and at the last settlement the number had risen to 3,571 and now stands excluding *peskas mahals* at 6,377.

An idea of the manner in which Parganas have been formed and divided may be obtained from examining a typical case. Jajpur Pargana consists of lands originally acquired by five Brahmans from 36 Parganas of Cuttack and Balasore. By partition these five estates have become 141, of which eight have been transferred to Balasore, and gifts, sales, and assignments for charitable and religious purposes have given rise to 323 other estates.

This is of course an extreme case, the average revenue of an estate in Jajpur being only Rs 100; but throughout the northern Parganas of the Cuttack District petty estates abound and partition has been carried to great lengths.

It is not even the case that the estates have, as might have been expected, been more compact, for it is commonly found that in partitioning an estate having lands in a number of villages, a portion of each block has been assigned to each co-sharer. Indeed, there was often much difficulty in separating out the lands of the partitioned estates at the time of attestation, in consequence of the very inconvenient division made.

271. Inheritance to landed property follows, except in a few of the *peskas mahals* and *killas*, the Hindu law, and the natural tendency is for the number of proprietors to increase.

Division of proprietary right.

Alienations of portions of estates for liquidation of debts is also very common. For instance, in *taluk* Gopinathpur, Pargana Jainabad, there were when the settlement began only two proprietors; since then they have, to raise money, sold the whole or portions of 56 villages, thus raising the number of recorded proprietors to 130. By these two methods, division among heirs and sales to strangers, the number of recorded proprietors in the three districts has been raised since the last settlement as shown in the following table:—

DISTRICT.				No. at last Settlement.	No. now recorded.
Cuttack	...	...	...	5,400	31,900
Puri	...	...	...	Not available	3,000
Balasore	...	...	...	1,500	7,500

The average number of recorded proprietors in an estate is in Cuttack about seven, in Balasore over five, and in Puri over six.

272. The changes of proprietorship prior to the last settlement are set forth in the *ruilads*,* and in the case of all the principal estates the history has been brought up

Transfers of estates.

to date in the special report.

It is thus possible to obtain a complete account of the transfers in the case of all the large *taluks*, but the history of the petty estates is necessarily very incomplete, and where there are many proprietors, it is often difficult to ascertain how they all acquired their interests.

In Balasore, out of 1,414 estates, Mr. Kingsford reports that 584 have descended wholly by inheritance to the heirs of the proprietors at the last Settlement; of 284 a part only has been alienated, 432 whole estates have been sold privately, 76 for arrears of revenue, and 38 under Civil Court decrees.

Complete figures are not available for Cuttack, but in the 503 principal estates it is found that, between the year 1805 and the last settlement, 204

* Vernacular completion reports.

transfers are recorded, of which 88 were on sale for arrears of revenue; since then there have been 451 transfers, of which only 24 were on sale for arrears of revenue. The shares recorded as still held by descendants of the original proprietors and their heirs only amount to the equivalent of 167 whole estates, so that two-thirds would appear to have been transferred; but this figure must be accepted with caution as it is difficult to identify all the heirs by enquiry or from an examination of the records, and my own experience would lead me to estimate that not more than a third had been transferred by sale.

The following figures are taken from the returns of the land registration department and, as all sales of estates are registered, are fairly complete:—

DISTRICT.	Period.	WHOLE ESTATE SOLD.			SALES OF PORTIONS OF ESTATES.						
		No.	Revenue.	Purchase money.	No.	Purchaser.					Purchase money.
						Maha-jans.	Zamin-dars.	Dazy-ajis, &c.	Rajats.	Others.	
		2	3					9	10		12
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cuttack ...	1890-99	34	11,787	1,73,073	5,127	246	3,192	1,099	121	469	3,28,625*
Balasore ...	1889-98	13	1,535	43,947	2,018	127	1,814	496	164	63	10,04,576
Puri ...	1896-99†	6		9,075	144	31	81	47	15	41	72,000

* Last two years only.

† Figures for only three years.

This shows that estates and shares of estates to the value of over Rs. 55,000 are annually sold in Cuttack; in Balasore the annual sales amount to Rs. 1,05,000, and in Puri to only Rs. 7,000.

If we take the price to be fifteen years' purchase of the revenue, this would give the revenue payable on the estates sold annually at over Rs. 12,000, and even if we take it at ten years' purchase, the revenue will only be about Rs. 18,000, so that not more than one per cent. of the zamindari appears to change hands by private sale every year.

The purchasers are generally of the land-holding classes, zamindars or *lakhirajdars*. Only about one in twenty is a *mahajan*. 'Others' probably includes pleaders and town people.

273. It has been related how the Maharatta régime and the revenue policy of the first British rulers led to the ruin of many of the old Uriya families, and it will be interesting to see how far this process of substitution of alien for native proprietors has continued to the present day.

It may at once be said that since about the year 1830 very few estates have passed into the possession of aliens, and, on the other hand, while but few of the Bengali proprietors have lost their estates, several have become practically naturalised in Orissa.

A general idea of the extent to which estates are in the possession of Bengalis and others may be obtained from the following table:—

DISTRICT.	NATIONALITY OF PROPRIETORS.							
	Percentage at last Settlement.				Percentage at the present Settlement.			
	Hindu Uriyas.	Maho-medans.	Bengalis.	Others.	Hindu Uriyas.	Maho-medans.	Bengalis.	Others.
1	2	3	4	5	6	7	8	9
Cuttack ...	78	7	15	less than 1 p. c.	90	5	4	1
Puri ...	...	...	...	...	95	2	2	1
Balasore ...	78	10	12	less than 1 p. c.	81	7	12	less than 1 p. c.

It will be seen that the proportion of Uriya Hindus has increased, but this, I fear, does not mean that the Bengalis have lost possession of many of their estates, but rather that the subdivision of proprietary rights has proceeded more rapidly in the small estates, which are almost all in the hands of Uriyas.

The most marked changes of proprietorship have been:—In Puri, the passing of estates into the hands of the *mahants* and the big *mahajan* families. In south Cuttack the gradual absorption of all the small estates by the *mahajan* families, the Chowdhris of Bhinjurpur and Gajrajpur and by *mahant* Raghunandan Das. In central and eastern Cuttack the Tagores, the family of Raja Digumber Mitter, a Bengali lady Srimati Arna Purna Debya, a Mahomedan family of Jessore, and other Bengali zamindars own almost all the big estates, and there have been comparatively few changes of proprietorship in the last fifty years.

In northern Cuttack the zamindars are for the most part Uriyas, and the most noticeable feature is the tendency of the estates to pass into the hands of proprietors drawn from the cultivating classes with infinite subdivision of lands and shares.

The big *mahajan* zamindars of Balasore have also obtained possession of considerable property in the Jajpur subdivision.

To complete the account of the non-Uriya zamindars the following table prepared for all the principal estates with a revenue of over Rs. 6,000 (temporarily-settled) in the province may be interesting:—

District.	Name of estate.	Land revenue.	Nationality of proprietor.	Resident or non-resident.	REMARKS.
1	2	3	4	5	6
Cuttack	Taluk— Patamundai ...	Rs. 42,756	Bengali	Non-resident	Bought at execution sale in 1865 after several changes of ownerships.
	Pandua ...	20,436	Ditto	Ditto	Bought at private sale in 1811.
	Biranti ...	12,054	Ditto	Ditto	Bought in 1833.
	Saibir ...	22,798	Uriya	Resident ...	Bought in 1847 at a revenue sale from a Bengali purchaser.
	Tappa— Shahjehanpur	8,583	Ditto	Ditto ...	Bought in 1818 at a revenue sale.
	Taluk— Krishanpur ...	7,796	Bengali	Non-resident	Bought in 1816 at a revenue sale.
	Mirpur ...	6,235	Uriya	Resident ...	Bought after last Settlement.
	Radhamohan Parshad.	7,889	Bengali	Ditto ...	Bought in execution sale 1835.
	Naharapur ...	6,181	Uriya	Ditto ...	Partly by inheritance.
	Dhaneswar ...	8,954	Ditto	Ditto ...	A number of proprietors, all recent purchasers.
	Bari ...	9,545	Bengali	Ditto ...	Purchased from the Raja of Aul in 1864.
	Narayanpur ...	9,701	Uriya	Ditto ...	Bought from the Raja of Aul.
	Narendrapur ...	6,888	Bengali	Non-resident	
	Tappa— Gopalpur ...	9,363	Uriya	Resident ...	Bought at a revenue sale 1805.
	Taluk— Govind Parshad	6,639	Ditto	Ditto ...	Bought in 1807 at a revenue sale; was again sold up in 1813, but bought back in 1814.

District.	Name of estate.	Land revenue.	Nationality of proprietor.	Resident or non-resident.	REMARKS.
1	2	3	4	5	6
Puri	Taluk— <i>conold.</i> Kotdes ...	Ra. 1,04,319	Uriya	Resident ...	This is the largest estate in Orissa and only passed out of the hands of the old proprietors in 1896; being bought in by the creditors. They are now recusant.
	Rahang ... Krishnachandra ... Krishnanagar ...	34,252 13,792 19,092	Bengali	Non-resident	These three estates were bought in 1809 by the ancestors of the present proprietors, who since 1813 have been recusant.
	Delang ...	43,464	Uriya	Resident ...	The property of the Raja of Puri, restored to him in 1807.
	Kotsahi ...	7,320	Bengali	Non-resident	Bought in 1813 at a revenue sale.
Balasore	Arang ... Radhashyampur ... Bidhyadharpur ...	5,954 6,109 11,200	Ditto Uriya Ditto	Resident ... Ditto Ditto	These three formed originally one estate of which half was sold in 1838 and half is still owned by the old proprietors.
	Padmalochanpur ... Prostapura ...	15,795 18,341	Bengali Ditto	Non-resident Ditto	Originally one estate bought by a Bengali before the last Settlement. Half was sold and the partition made in 1875.
	Mubarakpur ...	23,949	Ditto	Ditto	Bought at a revenue sale in 1838.
	Shyam Raipur ...	9,718	Ditto	Resident ...	Ditto ditto.
	Kalida ...	9,559	Uriya	Non-resident.	
	Jagannath Prasadh.	8,590	Bengali	Resident ...	Purchased in 1812 at a revenue sale; had been several times sold for arrears.

The table shows that of twenty-nine of the principal estates fifteen are owned by Bengalis. In Cuttack and Balasore the preponderance of Bengali proprietors is more marked than in the Puri district.

274. A country is necessarily at a disadvantage when the principal land owners live and spend their money abroad, and though the estates of Bengali proprietors are in general well managed by their resident managers, yet most of these zamindars live in Bengal and only rarely pay a personal visit to their estates. The following statement shows the number of absentee zamindars (*vide* Appendix):—

	Cuttack.	Puri.	Balasore.
Hindu	76	12	
Mahomedan	47	5	271
Christian	Nil	3	
Total	123	20	271

It will be observed that but a small proportion of the Bengalis are recorded as absentees. Many, such as Lakshmi Narayan Ray Choudhuri, and the various zamindar-pleaders have made themselves homes in Orissa; but the most important, the Tagores, the Mitters, Arna Purna Debya, and Nagendra Nath Ray Choudhuri all live in Calcutta.

It is been the fashion to decry the Bengali zamindar, but however much we may deplore the ruin of old families (there were really very few old families

in Orissa outside the Rajwarah) it can hardly be said that the country as a whole is a loser. Probably the most mismanaged estates in the Province are those of the Raja of Puri, and though he has given way before the *mahants* or the *mahajans* these in their turn cannot pretend to such good management as is to be found in the large estates of the Tagores or the Mitters. The most oppressive zamindar near Cuttack is an Uriya of old family, while in the property of his Bengali neighbours the raiyats are treated with much consideration. So, too, the history of the estates of Kujang, Kanika and Aul show the native management at a great disadvantage as compared with that of the zamindaris of Tiran, Harisipur, or Utikan.

The growth of petty proprietorship in the north of the district must doubtless tend to increase the average welfare of the population, though it gives trouble to the Collector and complicates revenue accounts.

In Balasore I have had fewer complaints from the estates belonging to the Mandals of Chinsura than from those owned by Uriya zamindars. Several prominent zamindars of Orissa at the beginning of the settlement proceedings spared no pains to oust raiyats from their lands in order to get as large a record of *nijchas* as possible.

To award the palm for management is invidious, but setting aside the Government *Khas mahals* and the Wards' estates the best managed estates in the districts undoubtedly belong to Babu Kailash Chandra Rai Mahashai of Dehurda.

In Puri little can be said about management. Half the area was held *khas* during the term of settlement owing to the recusancy of the Paikpara Raja in Serai, Chaubiskud, and Rahang. The mismanagement by the Raja of Puri in Lembai and by the old zamindars of Kotdes have been noticed elsewhere in the report.

275. Since the last Settlement the greatest moderation has been shown in the working of the Revenue Sale law, and the practice has grown up of accepting payment even at the eleventh hour, until default has come to be regarded almost as a matter of course.

The number of sales in different decennial periods is as follows :—

PERIOD.	NUMBER OF SALES.			REVENUE OF ESTATES SOLD.		
	Cuttack	Puri.*	Balasore.	Cuttack.	Puri.	Balasore.
				Rs.	Rs.	Rs.
1845—54 ...	...	5	11†	...	2,823	...
1855—65 ...	34	2	18‡	12,258	478	...
1866—75 ...	18	1	...	1,857	165	...
1876—85 ...	45	3	22	2,948	1,387	2,968
1886—95 ...	109	16	17	16,233	87,514	3,159
1896—99 ...	79	...	8	9,301	...	217

The figures have been compiled in the Collector's offices, and though the actual number of sales is at no period very large, the great increase towards the end of the century is very remarkable, and I am unable to account for it satisfactorily.

I can only suggest that it is due to the multiplication of proprietors, estates being brought to sale because one or two of the co-sharers have defaulted. Probably also proprietors with encumbered estates have found that they get a better price at a sale under Act XI of 1859 than they would if they had to sell it privately.

There is no doubt also that proprietors feared the new settlement. They had no reason to suppose that Government would take less than 65 per cent. of the assets in ordinary areas, i.e., areas having no special disabilities, and 60 per cent. in flooded areas; with these expectations, zamindars looked with dismay on the curtailment of their incomes. The unlooked-for liberality of Government and the Secretary of State in not only taking 50 to 55 per cent. as revenue, but in making the term thirty years, has given great confidence to the zamindars. It is possible that if this liberality could have been announced

* For Puri the periods are 1858-57, &c., down to 1888-87.

† From 1842 to 1855.

‡ From 1855 to 1868.

ten years ago, some zamindars might have struggled on to the end of the Settlement.

276. Nothing shows more clearly the increased security of tenure and the lighter assessment enjoyed by the land-holding classes under British, as compared with native, rule than the price paid on sales of proprietary right.

Value of proprietary right. Mr. Stirling* tells us that after carefully examining a vast number of bills of sale of old date, he could confidently affirm that from one-fourth to one-half of the *jama* was the ordinary selling-price of a zamindari or *taluk*.

For a few years after the accession of the British the numerous sales occasioned a glut in the market, and valuable estates changed hands for absurdly low sums, but after 1809 the market began to recover, and prices rose steadily. Mr. Stirling says that in 1821 the average selling-price was from 50 to 100 per cent. on the *sadar jama*, or from fifteen to twenty years' purchase of the recognised profits, and some estates fetched much larger prices.

On the conclusion of the thirty years' settlement prices rose rapidly, and from 1840 to 1849, 94 estates brought to sale for arrears of revenue fetched an average of four-and-a-half times the *sadar jama*, or about ten years' purchase of the admitted profits.† In Balasore, between 1829 and 1842, the five estates sold realised only three times their *sadar jama*, while eleven estates sold between 1842 and 1855, fetched nine-and-a-half times the *sadar jama*.

The prices paid at revenue sales from 1855 to the present date are as follows, the price being expressed in multiples of the *sadar jama*:—

Years.	Cuttack.	Puri.	Balasore.
1855—65	12	15	9
1865—75	20	18	Not available
1876—85	10	10	30
1886—95	8	2‡	14
1896—98	8	...	26

The falling off in prices in later years is difficult to account for, unless the reason was insecurity.

In the period from 1886 onwards it is natural to account for it by the expectation of the coming resettlement, but I cannot believe that this can have been an important factor so far back as 1876, and I can only suggest that many sales made in the last few years were of estates of which the fertility had, from various causes, been impaired and of which the *sadar jama* left a comparatively small margin of profit. It must be borne in mind that ten years' purchase of the *sadar jama* means twenty times the gross annual profit left to the zamindars at the last settlement, and it is by no means a low price; and we know that in some instances the estates sold had been seriously affected by deposits of sand.

In Puri the low price in 1880-95 is due to the inclusion of figures for the Kotdes estate, the greater part of which is *maurasi*, so that twice the revenue meant nearly ten times the zamindar's profits even if he collected all dues from the *sarbarahkars* and *muqaddams*.

In Cuttack five estates for which the new revenue had been settled were sold for arrears of revenue in March, 1899. The revenue was Rs. 139 and the price realised, Rs. 2,245, or nearly fifteen times the *sadar jama*.

277. The above figures are for forced sales, but they are borne out by the recorded prices for private sales. In Balasore the average prices expressed in the number of years' purchase of the Government revenues were—

1840—50 ...	...	7	1871—80 ...	...	81
1850—60 ...	...	18	1881—90 ...	...	24
1861—70 ...	...	20	1891—96 ...	...	16
After execution of <i>kabuliyat</i>	...	...	...	...	22

It will be seen that here, as in the case of revenue sales, there was a falling off during the last few years of the settlement due to the natural

* Paragraph 84 of his Minute.

† Mr. Collector Gouldsbury's report of 4th December, 1850.

‡ Owing to the low price paid for Kotdes.

anticipation of the enhancement of revenue and curtailment of profits, but that after execution of *kabuliyats* there was a recovery due to the lenient terms offered.

In Cuttack figures are not so complete, but it is found that in the 503 principal estates sales* involving the transfer of Rs. 2,04,600 of Government revenue are recorded, and the average price is one and-three-quarter times the revenue. Since the Settlement twelve times the land revenue has been paid in sales of shares with an aggregate revenue of Rs. 96,000.

The prices paid in Cuttack have not been much affected by the anticipation of enhancement at the new settlement, some of the highest prices having been given in the last few years.

Figures compiled at attestation show that since 1885 estates and portions of estates, with a total area of 17,414 acres, changed hands for Rs. 1,35,990, or about Rs. 7-13 per acre (say ten times the *sadar jama*), and the number of years' purchase for such of these estates as figures were available for is over 13½. The big estate of Padmalabhpur, in Dihi Arakhpur, was recently sold at an execution sale for Rs. 69,000, or twenty times the revenue, while a three anna nine pie share of taluk Gopinathpur has, in the last five years, been sold for Rs. 19,013, or thirty-five times the *sadar jama*.

The registration returns quoted in paragraph 272 show the average price paid for whole estates in Cuttack from 1890 to 1896 to be over seventeen years' purchase, and since then over eleven years' purchase of the *sadar jama*.

Mr. McPherson tells us that in Puri 21 estates with a revenue of Rs. 3,385 have been sold, chiefly in the last twenty years, for Rs. 55,510 or at about sixteen and-a-half years' purchase of the *sadar jama*, and that these estates are mostly in the worst parts of the district.

I conclude that during the latter part of the settlement the selling value of the larger estates varied from ten to twenty times the *sadar jama*, and that small portions of estates containing much *nij-chas* land might fetch thirty to forty times the old revenue.

It is too soon to tell the effect of the enhancements of the revenue on the selling price of landed property. There is, however, no doubt but that much more severe enhancement was expected, and that the lenient terms accorded have strengthened the market. In Balasore, Mr. Kingsford instances the case of *Killa Patna* sold in 1897 for Rs. 90,000 or one hundred and eighty-eight times the revenue. This is, however, hardly a fair example as the estate until it changed hands was a "*Killaajat*" (see Chapter XXIV, paragraph 610) and the revenue had not been altered since the beginning of the century. The revenue even after enhancement is only Rs. 2,406. Three other estates with an aggregate revenue of Rs. 1,083 have also been sold for twenty-two times the new revenue.

278. Under the Hindu rulers every village was a complete social and political unit with its own half hereditary and half elective officers, who administered its internal affairs with the assistance of the council of elders and acted as its spokesmen in all dealings with the higher officers of Government. A village without a head or a corporation was occasionally found but this was only where, for want of suitable house sites or other reason, no respectable cultivators cared to make it their permanent residence; such villages were known as *pahikasht* or cultivated by migratory raiyats, or as *bechapari*, i.e., without houses.

The most important of these village officers was the headman or *padhun* whose office was generally hereditary but who appears sometimes to have been elected by his co-villagers. He was responsible for the payment of the village revenues to his superior, the divisional head (*bisoi*), and in return was supposed to hold a twentieth of the land in cultivation free of assessment (*heta*) and probably collected small contributions from his co-villagers. With him was associated the village accountant (*bhoi*)† who was similarly paid by a grant of land.

Under the Moghul settlement as the superior officers crystallised into *talukdars* so the village headmen and accountants tended to become land-

* Including forced sales.

† Also known as *Kothkaran*, *Baithkaran*, *Sethi*.

holders, and they are now found in many villages as proprietary tenureholders under the names of (1) *Mugaddams*, (2) *Padhans*, (3) *Pursethis*, (4) *Sarbarahkars*.

Their tenures, as also those of the more recently created *kotkharidadars* and *shikmi* zamindars, I shall describe in the following paragraphs. They must be understood to be applicable only to the *Moghulbandi* or *Khalisa* area.

279. The *Mugaddams** are the old Hindu village headmen or *padhans*, under a Mahomedan name. They are of three

Mugaddams.

classes: (1) *Maurasi* or hereditary, (2) *Kharidadars*, those who purchased an hereditary right from the *talukdar* or, *mugaddam* (3) or *Zati*, i.e., appointed by the people of a village as their representative, or, sometimes, created by a zamindar.

The rights of these *mugaddams* are thus described by Mr. Stirling in paragraph 45 of his Note of 1821:—

“The natives of this district have still unquestionably a deep-rooted feeling that the hereditary or *Malik Mugaddams* had rights which ought not to have been suffered to pass away unnoticed and unprovided for. They are emphatically called *watundars* (i.e., holders of their own land) and *boonyad walas* (men of the foundation); their *jagir* or *nankar* lands are in many parts termed *pitrah* or ancestral, and what is of more importance than names the fact cannot be denied that they exercised precisely the same rights in selling or mortgaging the whole or a part of their *mugaddami*, in creating the *khuridaghi* tenure on a small scale, and granting inconsiderable portions of charity lands as the *talukdars* did, though the countersignature of the latter to their *kabala* was, perhaps, necessary. In the bills of sale, too, disposing of a *mugaddami*, all the rights arising from the village management, the perquisites on pasture grounds, gardens, fisheries, timber, &c., taxes on trades, &c., are transferred as fully and absolutely as on the scale of a *talukdari*. The hereditary *mugaddams* if now asked how they can prove that they have any right, will answer: Our *mugaddami* tenure is *maurasi*. We have inherited it from our ancestors from time immemorial. We have transferred and bought shares. We have sold pieces of ground and granted land free of rent. The *Kharidadars* and *Khyratdars* are forthcoming. Let them be asked from whom they obtained their land.”

280. Of these tenures many were separated from the control of the *talukdars* either as a special favour or on payment

Treatment of mugaddams.

of some consideration, or because of extortion or abuse of his authority by the *talukdar*; such separated tenures were known as “*Mazkuri*” (mentioned) and their holders being allowed to engage directly with Government for the payment of revenue have now been merged in the general body of zamindars.

For the rest the *mugaddams* were, during the early years of British rule, somewhat neglected, the revenue officers being generally imbued with the idea of the complete proprietorship of the *malguzar* and unable to conceive of any participation in his rights by an inferior tenureholder. In 1804 we find Mr. Collector Hunter writing that there is very little distinction between a zamindar and *mugaddam*; and so well were the incidents of the latter tenure understood that in deeds creating a *mugaddami* tenure no further description was considered necessary than the name afforded, the only qualification being an occasional reservation of the right of alienation.

Between 1804 and 1820 the *talukdars* were doing their best to get rid of the intermeddiate tenureholders, and as the latter's rights were undefined and they were always referred for redress to the Civil Courts, they generally went to the wall.

Mr. Stirling, however, in 1821, and after him the distinguished officers who made the last Settlement strongly advocated the claims of the *mugaddam* and in that settlement their rights were recognised and finally determined.

The respective rights of the zamindars and dependant *talukdars* of the Province were discussed in the replies to the Board's twenty-one questions of 1831 and afterwards in the orders on the Settlement reports: and after a conference held in Calcutta in 1834 the following principles were accepted†:—

“The first principle laid down was that village proprietors, who paid through a superior at the Session and have since similarly paid through a superior, shall continue so to pay until they prove their right to separation in a Court of Justice, the rules prescribed in Section XVI, Regulation VII of 1822 being duly observed in each case by the officer who makes the settlement under any modifications subsequently imposed upon those rules.

* Arabic word meaning “headman.”

† Letter No. 1 of 2nd February, 1835 from the Secretary to the Board of Revenue to the Secretary to Government.

"Principle second. That the *muqaddam* who shall be found in possession of a fixed tenure shall receive such proportion of the assets of the village (either in land, money, or kind according to usage) as in the judgment of the Revenue authorities shall be considered a fair allowance, he paying a full equitable rent to the party under engagements with Government for all the land within the tenure.

"Principle third. That the party under the engagements with Government shall reserve the *malikana* allowance on the nett *jama* prescribed by the Regulation and such further allowance on account of risks and expenses not exceeding (*malikana* included) 20 per cent. on the nett *jama*, as may be judged right by the Revenue authorities, unless under special circumstances, to be reported for the sanction of the Sadar Board and Government."

As a rule the *muqaddam* received 20 per cent. of the gross collection from the *khalisa** lands or sometimes, where a village was exposed to inundation or drought, 25 per cent., and in the case of the *lakhiraj* tenures resumed and assessed at half-rates he was allowed half of the total proprietary allowance of 15 per cent. the balance going to the zamindar.

281. No distinction was made between the three classes—hereditary, purchased, and appointed—provided only that the tenure had been in existence before the British conquest; and the incidents, as recognised in the Settlement and now modified by Act X of 1859, are—

Incidents of the *muqaddami* tenure.

- (1) The tenure is hereditary.
- (2) It is divisible, subject to the limitation that no zamindar is required to admit to registry or give effect to any distribution or division of the rent payable on account of any such tenure.† A division of rent allowed in writing by a zamindar is binding as against his successor in interest, but not as against an auction purchaser.
- (3) It is transferable.
- (4) The *muqaddam* is entitled to collect the rents fixed at the settlement and to any lawful increase in the rental.
- (5) The *muqaddam* is entitled to the possession of all lands in the village not leased to any tenant, and to all profits derived during the term of settlement from the reclamation of the waste lands.
- (6) The *muqaddam* exercises within his village all other functions and privileges of a zamindar.
- (7) He is liable to the payment of a fixed annual sum to the superior zamindar, and the amount so payable is only liable to alteration when the revenue payable by the zamindar is revised.
- (8) On default in payment the zamindar must sue the *muqaddam* for the amount due under Act X of 1859, and if all the landlords join in the suit, the tenure may be sold in execution of the decree, the balance of the purchase money after the satisfaction of the claim going to the defaulter.
- (9) On such sale the *muqaddams* are liable to be ousted from the lands in their possession, even though forming part of their ancestral *pitrati* land.‡
- (10) On recusancy they are entitled to a *malikana* of 5 per cent., but not to re-entry at the next settlement.
- (11) On purchase by the superior landlord the tenure does not lapse but remains separate and distinct.

282. Beside these *muqaddami* tenures in which the right to possession was fully established, we find also others where, though

Miadi muqaddams.

the claimant failed to prove a good title, he was, as being actually in possession, recorded in the settlement papers and given an allowance, but his tenure made voidable on sale of the estate for arrears of revenue or under the decree of a Civil Court. Such is the case with *muqaddami mauza* Jaganathpur in Pargana Nahakhand, District Cuttack; also with several of the tenures in Parganas Sujanagar and Saidabad, and in Taluk

* That is, lands in the possession of proprietors and their tenants.

† Section 106 of Act X of 1859. For the effect of the Tenancy Act, *vide* paragraph 254 *infra*.

‡ See Proclamation of 15th September, 1804, clause 7, and Board's orders of 8th November, 1804 as to the *Padhans* of Lembai. *Per contra* in practice they are difficult to dispossess.

Bisnabar which were created by the zamindar after the conquest. As a rule the temporary tenure-holders received the same allowances as *maurasi muqaddams*, but in a few instances only 10 per cent. was given.

283. The old Hindu name of the village headman was *padhan*, but most of this class became absorbed as *muqaddams* into the Mahomedan system; the survivors being for the most part in Lembai and the other Parganas of Puri allotted to the Raja of Khurda.

Their position differed from that of the *muqaddams* in two points*—

- (1) That, unlike the *muqaddams* who held a fixed amount of *jagir* land, the *padhan* had a customary right to hold one *mān* in every 20 *māns* of raiyati land in cultivation free of assessment as his "*pitraki*" or ancestral land.
- (2) That in default or sale of the tenure, the *muqaddam* retained his *jagir*, but the *padhan* was ousted from his "*pitraki*."

At the settlement of 1837 they received exactly the same treatment as *muqaddams*, with this exception, that while to the latter the right of re-entry after recusancy was disallowed, to *padhans* it was conceded.

284. The following account of the origin and incidents of the *sarbarahkari* tenure has been taken with some modifications from Mr. H. McPherson's report on the Puri District:—

The nature of the *sarbarahkari*† rights, its origin and the principles to be followed in disposing of *sarbarahkari* claims were the subject of much correspondence at last settlement. As to the origin of the right, I may quote paragraph 3 of Mr. Commissioner Ricketts' No. 1131, dated 23rd April, 1838, to the Board of Revenue:—

"Some of these *sarbarakars* were originally mere servants of the zamindars who collected rents from the cultivators and enjoyed *jagirs*. Some part obtained possession of their villages as farmers only, but the tenure having descended for several generations from father to son, a prescriptive right has been created. Some were *Sirdar Paiks* who, with their subordinates, were bound to attend the summons of their chiefs to the fields. They paid rent for that part of their village lands not occupied as *jagir*. All classes now claim equal privileges, continued possession of their villages, paying the *jama* which at the last Settlement may be assessed."

A curious instance of the creation of the *sarbarahkari* right is recorded in the last settlement Report of Pargana Serai (Taluk Krishnanagar).

Mr. Wilkinson took engagements from village headmen who had otherwise no claim to be considered *sarbarahkars* on the ground that it was expedient to maintain these men in their immunities and perquisites that they may not be driven to acts of violence, and because their removal would impair the high state of cultivation in which these *mahals* were. In the Patamundai‡ estate of Cuttack, too, the Settlement Officers were accused of not upholding but creating *sarbarahkari* tenures which had not previously existed, and eventually it was decided not to recognise any of their tenures.

285. Such being the diversity of origin of the *sarbarahkari* tenures, there was naturally the greatest variety in the rights and liabilities of the many claimants to admission at the last settlement, and after a great deal of correspondence§ and some rather contradictory orders the following principles were laid down by Government for the guidance of the local officers, and may be accepted as an authoritative declaration of the rights and incidents of the tenure||:—

"Firstly.—That the *sarbarahkari* tenure is recognized as one of the existing under-tenures of the Province."

"Secondly.—That the Collector at the time of making a settlement must, as in the case of *muqaddams*, fix the share of the existing rental to be allowed to a *sarbarahkar* and the amount payable by him for the village under his management to the zamindar."

* Vide Mr. Stirling's Minute, paragraph 53.

† *Sarbarahkar* (P.), a steward, one who manages supplies.

‡ Letter No. 1769 of the 25th September, 1833, from the Secretary to Government to the Secretary to the Board of Revenue.

§ Commissioner to Board, No. 1131 of 23rd April, 1838, and the Settlement papers of taluks Nonarund, Saibir, Patamundai, and Bamanpur.

|| Government to Board No. 1769 of 25th September, 1833.

"Thirdly.—That if a *sarbarakari* tenure be found at the time of Settlement in the possession of several joint-*sarbarakars*, the Collector, with the concurrence of the *samindar*, may select one or more of the body to be recorded manager of the *sarbarakar*."

"Fourthly.—That *sarbarakars* so selected and recorded cannot be ousted from their tenures, except for default of payment of rent or for mismanagement proved to the satisfaction of the Collector."

"Fifthly.—That the tenure should never be admitted at the time of Settlement as a hereditary property *maurasi sarbarakari* unless it has been held as such uninterruptedly from a period antecedent to the British accession, i.e., antecedent to 14th October, 1803, and unless the claimant be in possession of the tenure at the time or within a year previous to the time of Settlement."

"Sixthly.—That in cases in which hereditary succession or uninterrupted occupation cannot be shown, but the claimant himself has been long in possession and is in possession at the time of Settlement, the Collector may, in consideration of occupancy and according to its duration and circumstances, propose a temporary admission of the tenure (*miadi sarbarakari*) for such term and on such condition as the case may seem to require."

"Seventhly.—That no admitted *sarbarakari* tenure, hereditary or temporary, can be alienated or subdivided without the consent of the *zamindar*."

In the correspondence on the settlement of taluk Bamanpur* it was further laid down that in cases of default in payment of the *jama* fixed the rights of the *sarbarahkars* should revert to the *zamindar*.

286. In the case of the *miadi sarbarahkars* admitted under the sixth provision of the rules quoted the term fixed was usually that of the settlement; in other cases† they were given only a life right, the tenure lapsing to the *zamindar* on the death of the incumbent.

Besides the restriction of the term of settlement the temporary tenures differed only from the hereditary or *maurasi sarbarahkars* in that, on sale of the parent estate for arrears of revenue, or under the decree of a Civil Court, the former were voidable. Mr. McPherson is of opinion that there is the further distinction that while the *maurasi sarbarahkar* has a legal claim to admission at this present and any subsequent Settlement the *miadi sarbarahkar* could only have a reasonable expectation of being allowed to engage; but I am unable to find any authority for this distinction; it appears to me that the tenure if admitted, though only for a term, at the last settlement and still subsisting has acquired a right to recognition under Clause 6 of the Government Rules. It does not appear that the *zamindars* have often availed themselves of the powers given them of extinguishing these encumbrances. Originally non-payment of the rent involved the forfeiture of the tenure, and on the passing of the first rent law the tenureholder, whether permanent or temporary, continued to be liable to ejectment as his tenure was not legally transferable‡. In practice, however, these tenures are invariably brought to sale as though they were *muqaddami* and are sometimes bought in by *zamindars* themselves who continue to hold them as separate properties. For instance, in Saibir all the *sarbarahkari* tenures but one are now held, in whole or part, by the *zamindars*, though some were only confirmed for the lifetime of the incumbents.

In the present settlement no distinction except in name has been made in the engagements taken from temporary and permanent *sarbarahkars* and their tenures are protected for the next thirty years.

287. Section 65 of the Bengal Tenancy Act, which has been extended to Orissa, protects from eviction for arrears of rent all permanent tenureholders, such as *maurasi sarbarahkars* and though Section 11 which makes permanent tenures transferable has not been extended, the effect of the change of law will be to crystallise the practice of putting up to sale *maurasi sarbarahkars*. With the *miadi sarbarahkars* the case is different. Had temporary engagements been taken from the holders they would doubtless have continued to be liable to eviction, but custom can make a tenure permanent, and for many years it has been the custom to treat *miadi sarbarahkars* as though they held heritable, permanent, and transferable tenures, and now in this settlement their status has been tacitly acknowledged to be the same as that of their *maurasi* brethren. It cannot be prophesied what the Civil Courts will hold, but there is at least room to surmise that no distinction will henceforward be made between the two classes.

* Government Order No. 403 of the 2nd April, 1839.

† As in taluk Saibir of Cuttack.

‡ Section 22, Section 78, and Section 106, Act X of 1859.

288. The *pursethis* are not a common class of proprietary tenure-holders, and I cannot find any better account of them than that given by Mr. Mills, which I here quote * :—

Pursethis.

“The word *Pursethi* is of Sanskrit derivation and means the headman of the *patna*. There are two classes of *pursethis*. The first and the most numerous are *pursethis* of a particular class of *patnas* appointed by the founder of the *patna* or the village community. His office which depends on the will and pleasure of his superior, is to collect the rents, superintend the cultivation, settle raiyats in the village and perform all other functions of a purely ministerial nature. His emoluments are, in part, lands at low rates and in part a profit on the collections, varying in proportion to the extent of the village. The proprietors in some instances allow them to engage for the revenue of the village, in which case they are bound to pay a fixed sum as rent, and are allowed to enjoy whatever they can realise over and above that amount.

“The other class are *pursethis* who have purchased or acquired from the zamindar a grant of land and established a village on it which is designated *patna*. The rights of these very nearly assimilate to those of the *muqaddams*, they can alienate their property which is hereditary, bequeath it to others; and may in every respect be considered like *muqaddams* proprietors of the land contained in the *patna* subject to a certain fixed demand. I cannot ascertain whether they pay any *rusoom* to the zamindar; the present incumbents do not, but it is customary to make a trifling present at the auspicious *Soonis*.”

To the second class belong the *pursethi muqaddams* of taluk Abdulabad of Assureswar and of Pargana Bakhrabad in Cuttack, who received exactly the same treatment as *muqaddams* †.

Of the former class was the *pursethi* of Chauliagung *patna* who at the last settlement was found so incompetent that the Collector dismissed him and appointed in his place one of the numerous proprietors of this village, allowing him 10 per cent. for the expenses of collection from the raiyats and co-sharers. He was subsequently ousted by the villagers and his heir has not been recognised in this settlement. Here therefore the *pursethi* was of the nature of a “report-dar” in a *sasun* village, the other proprietors becoming *shikmi* zamindars.

289. It was customary in the days of the Moghuls and Mahrattas for the superior Revenue officers to recognise a species of sale by which those who engaged for the revenue

Kharida tenure.

whether as zamindars, *talukdars* or *muqaddams* transferred small areas of waste land ‡ and jungle to persons who undertook to bring it under cultivation or to found villages. The areas were understood to be small and worthless but fraud was practised in many cases and valuable lands were alienated for a large consideration which was pocketed by the transferor. A peculiarity of the *kharida* (or purchased) lands was that they frequently consisted of scattered patches spread over the whole pargana or district §. The origin of these scattered tenures is obscure but the probability appears to be that the tenures were originally not one but many held by various persons (often servants) who for convenience were all subordinated to one or two of the principal men among them. *Patna* Bagh Brindaban and *Patna* Ghulam Ali are the two most remarkable instances; the latter stretches from Kotdes in Puri to Bhadrak in Balasore, and the former from Balasore to the Subarnarekha. The lands had, as a rule, a small rent assessed on them || which they continued to pay through the zamindar of the parent estate. In some cases they were rent-free and were then called *ma'afi kharida*.

At the conquest it was found that some 800 *kharida* holdings were paying revenue direct to the Mahrattas. These were continued as separate estates, and the *kharidadars*, or in some instances only their representative, were allowed to engage for the payment of revenue.

These purchasers acquired all rights of the *talukdars* or *muqaddams* from whom they derived their title and had at least as good a right to be considered actual proprietors of the soil.

290. The proper method of treating them was a problem that it took the Revenue officers a long time to solve, but in 1837

Treatment of *kharidadars*.

it was finally decided to divide all *kharidadars* into two classes ¶—first class, those who had derived their title from zamindars;

* Report of 13th July, 1835 on taluk Bisanbar.

† Extract from Board's proceedings of 11th August, 1837. *Per contra*, Mr. Mills states that they were treated as “*sarbarakar*” but this is not the case.

‡ *Aras*, *banjar kharidjama*.

§ *Tanki* or *Sarbarakkari Kharida*.

¶ Government to Board No. 983 of 27th June, 1837 and other papers of taluk Malipur; also Mr. Commissioner Ricketts' No. 2443 of 25th October, 1837, to the Collectors.

§ *Kharidagi bas-i-samias*.

second class, those who had derived their title from *muqaddams* and other tenure-holders. The first class were allowed a deduction of 30 per cent. from the assets, the zamindar through whom they paid getting 5 per cent. Their claim to *malikana* was allowed. The second class were allowed a deduction of 20 per cent. from the assets, 15 per cent. being given to the zamindars or divided between him and the *muqaddam* where the rent was payable through the latter. They were not allowed *malikana* on recusancy. The titles of *ma'afi kharidadars* to hold without payment of rent were enquired into in the same way as those of *lakhirajdars*—that is, their lands were assessed or allowed to remain rent free according as the tenure would have been invalid or valid if held under a grant instead of a deed of purchase, and in the event of the tenure being found invalid they came under the ordinary rules for *kharidadars* of the first and second class. *

The tenures assessed are classed in the Settlement papers as *pursethi kharida*, *koth kharida*, *shikmi kharida*, and *kharida jamabandi*. The last two tenures are practically identical, though the term *kharida jamabandi* is generally applied to the pettier class and the *shikmi kharida* often closely approaches the *pursethi* in its nature. The latter are found in but a few places, and I give here a description of the tenure as it exists in *patna* Bagh Brindaban of Balasore. This estate consisted of parcels of land in 72 villages, all of which had been purchased by private individuals who paid their revenue through the *thana daroga*. On the British conquest the *daroga* for the time being was one of these purchasers and was allowed to engage as zamindar, † the holders of the other parcels being recorded as *shikmi kharidadars*, and in the case of the founders of hamlets of "*patnas*" as *pursethi kharidadars* receiving 20, 25, or 30 per cent. as allowances. These latter, 17 in number, besides 22 *shikmi kharidadars* found in possession of entire villages, have been recognised as proprietary tenure-holders and allowed to execute *kabuliyats*.

In Cuttack one such tenure has been recognised in *manza* Kumaripatna Paigana Dalijora which was really a *kharida jamabandi* tenure of the second class, but consists of an entire village of which rent, but not the lands, is divided between five estates, and another in Khairang Tumbla Andaisahi in tanzi No. 2740; *kabuliyats* have also been taken from *koth kharidadars* of Tiran; (see paragraph 292) but for the bulk of *shikmi kharida* and *kharida jamabandi* tenures rents have been settled under the Tenancy Act for the term of the Settlement (see paragraph 476).

291. The most curious of all the subordinate proprietary tenures is the *shikmi* (i.e., "included") *Zamindari* which is found in all three districts.

Shikmi zamindars.

Unlike the *muqaddami* and *padhani* tenures the *shikmi zamindari* appears to be of recent creation and to have arisen in one of the following three ways:—

The first and perhaps the most common case is that of resumed service tenures, such as the *dograi mahals* and resumed *jagir* villages, where one or two of the *jagirdars* were permitted to engage for the payment of the revenue, the others being recorded as *shikmi zamindars* paying through the recorded *malguzars* who got as a rule 10 per cent. for collection expenses. Why they were recorded in this manner and not as co-sharers may best be explained by quoting the opinions of the officers who made the settlement, and I therefore, make no apology for here reproducing paragraphs 72 to 74 of Mr. Ricketts' reply to the Board's twenty-one questions in 1831:—

"Such for instance, besides others, are Dograi Mahals. The right of no individual Dogra was originally superior to that of the rest; each Dogra had possession, on payment of revenue, of the land which before it was resumed constituted his *jagir*. At the conquest the name of one Dogra only was recorded, the others retaining possession of their lands, but paying through him; this was an arrangement made by themselves, and not directed by any authority. Before this voluntary surrender of privilege, the rights of all were equal; what relation the non-recorded Dogras hold with those recorded is now matter of dispute. One of these Dogra mahals was sold by auction for arrears for revenue. The auction purchaser wished to oust all the Dogras on the plea that, being all sharers, the interests and rights had been sold with those of the recorded proprietor. The Dogras pleaded right of possession as under-holders. As acting judge of Cuttack, I upheld the possession of the Dogras as holders

* Collector to Commissioner, No. 382 of 27th October, 1837, Commissioner to Collector No. 2540 of 31st October, 1837.

† See paragraphs 8 and 9 of letter No. 806 of 18th April, 1837 from Mr. Commissioner Ricketts to Sadar Board of Revenue and the papers of taluk Mahipur.

under the auction purchaser; in fact, decided that they should not be considered as having been joint sharers, but *shikmi talukholders* of the recorded proprietor. I considered this question of great general interest, and so certified to the Superior Court. A special appeal was admitted, and on trial my decision being upheld, the non-recorded Dogras are still in possession of their tenures, the revenue of which they pay through the auction purchaser. There are now three suits pending in the Civil Court at Cuttack instituted by three Dogras of another Dogra mahal, the circumstances of which are precisely the same, excepting that it has not been sold for arrears, in which they claim equal privileges with the dogra recorded, and demand to be registered with him as *sadar malguzars*; the sums at which the suits are laid being, respectively, Rs. 37, Rs. 17, Rs. 2 As. 12 and Rs. 2 As. 15.

"There is not a doubt that their rights were equal to those of the Dogra recorded that they were precisely the same; but had I to decide the cases, I should most certainly notwithstanding my conviction of what their rights were formerly, declare them to be under-tenants and refuse their prayer to be admitted as *sadar malguzars*. Some uniformity of principle is necessary; they must either be superior holders or under-holders; the privileges of both cannot be allowed them; persons of the same class cannot be permitted to claim whichever denomination may be suited to the occasion—to be sharers before a sale, and under-holders after one. Their situation ought to be, but is not, defined."

This case it will be seen is very similar to that of the *kharidagi bazari zamin* estates in which the principal purchaser was allowed to engage for the revenue and the others recorded as *shikmi kharidadars* getting 20 or 30 per cent. as allowances.

The second case is that in which lands had been assigned * by a *malguzar* for the support of his near relatives. The relative, if not admitted to separately engage was recorded as a *shikmi zamindar* and generally received the whole of the *malikana* allowance.

Such was the origin of the five *shikmi* tenures in taluk Mirpur Pargana Tisania, which were grants to relatives of the Chaudhri. The tenureholders were, at the last Settlement, left to make their own terms with zamindars and have enjoyed the whole of the allowances.†

In taluk Sundi, Pargana Benahar, the *shikmi* zamindar was similarly left to make his own terms and got 70 per cent. out of a total allowance of 40 per cent. His agreement was challenged in the Civil Court by a purchaser of the estate, but was upheld by the Court as valid, and has been recognised in this Settlement, an allowance of 40 per cent. given to him.

A third case is that of alienations of one or two villages of an estate previous to the last Settlement, when the purchaser was sometimes recorded as a *shikmi* zamindar getting the whole allowances, instead of as a co-sharer. Such is the case in mauza Olatpur, Pargana Sujannagar, and in several tenures in Sailo.

In taluk Sayyadpur, Pargana Tisania, there is a *shikmi* zamindari tenure; the tenureholder claimed to hold the land as *kharida jamabandi*, but the purchase having been made since the last Settlement his claim was disallowed; he was however recorded as a *shikmi* zamindar and got 30 per cent., the zamindar getting only 5 per cent., so that he was left rather better off if anything than if his title had been good.

The same was the case with *mauza* Chackrapur in taluk Mirpur.

292. In a few very uncommon instances we find more than one subordinate

Subordinate proprietary tenures. proprietary right. In taluk Abdulabad Pargana Asureswar there is a *shikmi pursethi* tenure under *pursethi patna* Bengi. It has been recognised in this Settlement, the intermediate sub-proprietor getting only 5 per cent. allowances.

The most complicated case is however that of the *koth kharida* tenures of Tiran. It appears that in the early years of the present century the Raja of Kujang had forcibly possessed himself of several villages belonging to revenue-paying estates in the *moghulbandi*, and at the last Settlement claimed to hold them as a separate *mahal*. This claim was rejected and the lands were settled with him as *koth kharida* and an allowance of 20 per cent of his collections given to him.

In some of these villages there were *sarbarahkars* getting allowances of 20 per cent., under whom again were in some cases *bazyastidars* paying only half of the rent they realised from the *mugaddams* who themselves retained 20 per cent. of the raiyati assets. In this way 29 per cent. of the gross rental found its way

* As "Khorak Posak" or "Baradaran Jagir."

† In this Settlement also they have been left to make their own terms.

into the pockets of the zamindars and 25 per cent. was paid into the Government Treasury. In the present Settlement fair rents were settled under Section 7 of the Bengal Tenancy Act for the *sub-mugaddams* and *bazyastidars*, and the payments of the latter were divided in the ratio of 18 per cent. to the *sarbarahkar*, 12 per cent. to the *koth kharidadar*, and the balance (70 per cent.) less certain temporary concessions, divided in the ratio of 15 to 25 between the zamindar and Government.

Another case is that of taluk Danardanpur of Pargana Barpolla in which *mugaddams* were found holding under *bazyastidars* and in turn collecting rents from *shikmi bazyastidars*. In these estates fair rents were settled for all the tenures under the Tenancy Act.

All these tenureholders except the *shikmi kharida* and *kharida jumabandi* have in the present Settlement been treated as sub-proprietors*. Rents have not been settled in their case under the Tenancy Act, but they have been allowed to retain a share of the proprietary allowances, and have generally been given the whole benefit of any reduction in the proportion of the gross assets taken as revenue.† They have executed *kabuliyats* for the payment of the revenue assessed in much the same form as the zamindars, and no attempt has been made to curtail or define any of their existing rights and privileges except in so far as they are set forth in the *kabuliyat*.‡

With few exceptions no tenures of this nature obtained recognition unless mention of them was found in the papers of the last Settlement.

An instance of departure from this rule is to be found in taluk Mansara in Pargana Tisania where two tenures not recognised in the last Settlement were decreed by the Civil Court and given an allowance of 10 per cent., which has been continued to them in this Settlement.

There are also a few cases in which tenure-holders other than *mugaddams*, *sarbarahkars*, *padhans*, and *pursethis*, and *shikmi* zamindars have been treated as sub-proprietors. I have already mentioned the case of the *shikmi kharida* and *koth kharida* tenures and besides these there are some *tankidars*,§ in possession of entire villages who have, from motives of policy and convenience, been given a share of the proprietary allowances and allowed to execute *kabuliyats*. In two other cases tenures found to be existing at the last Settlement but not recognised have continued throughout the period of Settlement. In one of these cases a *maurasi mugaddami* has been granted with the permission of the Board where the *jama* of the tenure had not altered (see report of of estate No. 62 of Puri), and in another case a *sarbarahkari* right has been recognised (*mauza Atto*, taluk Talpara, mauzi No. 43 of Balasore).

293. All these classes of tenure-holders are, as regards their relations with their tenants, in exactly the same position as zamindars, and what has been said of the latter will apply to these also.

As regards their relations with their landlords and their own circumstances the points of which I propose to treat specially are—

- (1) Right to *malikana* and re-entry.
- (2) Subdivision of proprietary tenures.
- (3) Transfer of proprietary tenures.
- (4) Collections from proprietary tenure-holders.
- (5) Effect of the recent Settlement and of the introduction of the Tenancy Act.

This last heading is inevitably somewhat mixed up with those preceding it.

294. The *mugaddams* and *padhans* were considered to have a quasi proprietary right in the soil and were generally allowed 5 per cent. as *malikana* besides 15 to 20 per cent. for the expenses of collection,|| while the

* i.e., "dependant *tolukdars*" in the language of the regulations.

† See *infra* paragraph 558.

‡ For form of *kabuliyat* see Appendix C.

§ Two in taluk Balbhadrapur and one in taluk Birsuti of Pargana Tikan.

|| An attempt is generally made in the vernacular accounts of the last Settlement to reserve the term *malikana* to *mugaddams'* allowances while *sarbarahkars'* allowances are recorded as *kharcha*.

sarbarahkars got only the latter amount. Mr. Lewis of the Board of Revenue laid down the distinction in the clearest terms. He wrote* :—

"Muqadams stand on a different footing (*i.e.* from *sarbarahkars*); they have a right of property apparently in the soil, which having been conceded, is of course a saleable property; and in considering the allowance made to them the difference here noted should never be lost sight of. The *sarbarakar* I would allow 10 per cent. for the risk and trouble of collecting; the *muqadam* 5 per cent. more on account of his partial proprietary rights."

The *padhans* retained in the event of recusancy 5 per cent. upon the *jama*, and were conceded the right of re-entry on the renewal of the Settlement,† whereas in the event of a *muqaddam* or *sarbarahkar* refusing to hold his village at the *jama* assessed at a Settlement he would be dispossessed and his village taken *hastabud*. The reason for this exaltation of the *padhan* above the *muqaddam* is unfathomable, but such were the decisions of Government. *Kharidars* enjoyed the rights of the persons from whom they purchased. As proprietors of the soil they obtained all the *malikana* which the zamindar if the tenure was of the first, or the *muqaddam* if it was of the second class, would have had; and the zamindar or *muqaddam* received only collection expenses. In the event of recusancy a *kharidadar* of the first class was entitled to a *malikana* of 5 per cent., while the zamindar was placed in possession and got 25 per cent., and he had a right to re-entry at the next Settlement; but a second class tenure was destroyed.‡

295. The following table shows the number of tenures and the number of recorded co-sharers in the three districts at the last and present Settlements.‡

NAME OF TENURE	CUTTACK.				PURI.				BALASORE.			
	Number of tenures.		Number of tenure holders.		Number of tenures		Number of tenure holders.		Number of tenures		Number of tenure holders.	
									10		12	
	Last.	Present	Last.	Present	Last	Present	Last.	Present	Last.	Present.	Last	Present.
<i>Muqaddami</i>	537	593	791	6,850	491	486	3,000	680	...	113	...	829
<i>Sarbarahkari</i>	339	281	420	2,314	198	211	...	1,181	...	731	...	2,525
<i>Padhani</i> ...	1	2	1	8	279	259	600	3,507	...	...	...	...
<i>Pursethi</i> ...	11	18	24	86	...	...	...	...	...	...	...	...
<i>Kharidi</i> ...	2	2	2	11	...	...	...	...	...	39	...	188
<i>Shikmi Zamin dani.</i>	241	166	109	1,293	...	5	...	27	...	2	...	15
Other ..		69	195	36	...	...	...	...	...	...	...	...
Total ...	1,138	1,131	1,366	10,598	968	961	3,600	11,568	...	885	...	3,557

Muqaddami tenures are most common in the Kotdes Pargana of Puri, which contains 356, in Kato and other Parganas along the Katjuri, and in Banchas in Balasore District, but are very generally distributed. *Sarbarahkari* tenures are also most numerous in Kotdes and Banchas Parganas, but are found throughout the Province.

The *padhani* tenures are almost confined to Parganas Lembai, Serai, Rahang, and Chaubiskud of Puri; there being also two in Cuttack Haveli. The *pursethi* tenures are confined to Bakhrabad and Asureswar Parganas in Cuttack.

Figures showing the number of tenures at the last Settlement in Puri are taken from the late Babu Nandakishore Das' report and those for Cuttack have been compiled afresh from the *ruidads*, but the figures in Mr. Fiddian's report on Balasore cannot be reconciled with those now found.

In Cuttack it will be seen that, owing to partition, the number of *muqaddami* tenures has increased from 537 to 593, while the number of *muqaddams* has risen from 791 to 6,850; a few *sarbarahkars* have been dispossessed and their number of tenures reduced from 339 to 281. The number of *shikmi zamindari* tenures has been largely reduced as they are for the most part very

* Proceedings of Board of Revenue of 12th January 1898 in *taluk Bamanpur*.

† Commissioner to Collector, No. 2453 of 26th October 1897.

‡ *Tanki 3, kot kharida 16.*

§ See Appendix H. A.; H. B.; H. C.

petty and the holders have often been dispossessed. At the last Settlement several *shikmi zamindari* tenures were often settled with one person, so that the number of tenureholders is less than that of tenures.

In Puri there has been but little change in the total number of tenures, there being now 961 against 968 at the last Settlement, and the decrease in *muqaddami* and *padhani* and increase in *sarbarahkari* is perhaps due to confusion in the classification. In south Balasore there has been an enormous increase in the number of tenures, which in Senaut has, by partition of estates and sale of portions of tenures, been raised from 100 to 493. In north Balasore there has been less division.

Multiplication of Proprietary
tenure-holders.

296. As long ago as 1831 Mr. Ricketts, the Collector of Balasore wrote:—

"Inheritance according to Hindu law was not acknowledged as a privilege of *sarbarahkars* and *muqaddams* before the conquest; and since having been as often disallowed it is still open to adjustment. A recognition of such a privilege is, in my opinion, not only injurious to the interests of the State, but to those of the zamindars, raiyats, and the *muqaddams* themselves."

I find from the *ruidads* that it was the general rule to enter in the papers of the last Settlement only the head or *kartas* of the family. I find in three Parganas 158 tenures with altogether 236 tenure-holders' names recorded, but the entry "*oger*" (and others) frequently occurring shows these to have been only the principal co-sharers. Now the natural effect of the Hindu law of inheritance is seen in the multiplication of tenure-holders which all the excellent principles enunciated by the Collectors and higher revenue officers have proved powerless to check, so that the average number of co sharers in a *maurasi* village is, at the present day, nine, and in the case of *sarbarahkari*, in its origin a purely service tenure, is eleven.

To the tenure-holder himself the result is to reduce him to the level of the ordinary raiyat, and though I am personally far from regarding this as a serious evil so long as the tenure-holders are able to retain possession of their property, yet I agree with the opinion expressed by Mr. Nathan in his note on Kotdes that this subdivision has in many instances been the ruin of the *muqaddams* and has been a source of much trouble to the proprietors.

297. That the *sarbarahkari* tenure was not transferable or divisible has

Division of Proprietary tenures.

been shown in a previous paragraph, but even at the last Settlement the number of *sarbarahkars* was considerable, and that Government was fully alive to the necessity of putting a stop to the multiplication of co-sharers will be made clear by the following quotation from the Board's proceedings on the Settlement of *taluk Bamanpur*:—

"I entirely concur with him in thinking that the multiplication of these hereditary subordinate collectors, entitled *sarbarahkars*, is to be by every possible means avoided. There may have been difficulties in the way of undoing what had already been done, and restoring to their original integrity in the hands of one man this duty of making the collection in particular villages; but the further subdivision of these rights by sale or gift should be pronounced illegal; and in all cases where the law of inheritance has operated, or may in future operate, to subdivide them they should be held in an *ijmal* form and recognised by Government only as a unity. The whole thing is an anomaly and should be kept within the narrowest limits possible."

In the case of *muqaddami* or *padhani* tenures the right to sell a share in the tenure was undeniable, but Mr. Mills held* that by such sale only a right to participation in the profits passed, and not a right to collection of rents or to possession of land; he further stated it as his opinion that no admitted *padham* or *muqaddami* tenure could be divided without the consent of the zamindar.

While the natural tendency is for the number of tenure-holders to multiply, the law† does not compel the zamindar to recognise any division of the rent or lands, and it is rare to find a case where such division has been allowed. Instances of exceptions to the general rule are *muqaddami mauza Dagum* in *taluk Nagpur*, Pargana Benahar, which was divided into three under the decree of a Civil Court, and the two *pursethi* tenures *Patna Bengi* and *Patna Hanupur* now divided into ten tenures all in different villages; both divisions obtaining recognition at this Settlement.

* Commissioner to Collector of Puri, No. 3617 of 30th November 1838.

† Section 27, Act X of 1869, and Section 68, Act VIII of 1885.

Even when a mahal was divided into two or more estates under the Partition law, the Deputy Collector did not ordinarily make any actual division of the lands of *maurasi* villages.* He would enter a certain share of the total area and rent as belonging to one of the estates, but on the ground he made no partition, and indeed without the consent of the *muqaddams* or *sarbarah-kars* he would have no right to do so.

Occasionally, however, a tenure has been split up, and it is not uncommon to find that after the partition of an estate under the Batwara law the tenure-holders have divided their lands between the newly-formed estates, and the division, even if not originally binding on the zamindars and Government, has been stereotyped in the present Settlement.

298. It has been pointed out that the natural result of the Hindu law of inheritance was to cause a multiplication and consequent impoverishment of the village sub-proprietors and the recognition of their right to transfer their property placed in their hands the instrument of their own destruction.

All along the basin of the Katjuri river, where the largest number of these tenures were admitted at the last Settlement, the *muqaddams* and *sarbarakars* have been in contact with some of the biggest and most powerful zamindars of the Province† and in times of bad harvests and scarcity have been unable to resist the pressure brought on them to sell their birthright, i.e., not only a right to participation in the profits, but a right to collect a share or the whole of the rent, and to hold and cultivate, the *nijot* land and we now find that a very large number of the tenures are held by the zamindars and by well-to-do *mahajans* of Cuttack.

It would be difficult without very minute enquiries to ascertain how all the present shareholders acquired their interests, but Mr. Nathan in Kotdes has left on record the following note of his investigations and conclusions:—

"The experience of the last sixty years shows that the undisputed rights of succession and the freedom of transfer which the *muqadam* has gradually acquired and which we have finally recognised, are a fatal gift which is gradually undermining his existence. The devolution of property obeys in Orissa the Mitakshyara law."

"The constant splitting up of shares which this system involves has a continual tendency to make the tenure insufficient to support the family. When this pressure begins to be severely felt, one of two things happens, either the *muqadams* succeed in gradually ousting the raiyats and by cultivating the lands themselves support their families and pay the rent or they find the struggle hopeless and are forced to sell their ancestral rights. Sometimes they disappear altogether; more frequently they remain in the village, cultivating their ancestral *patrahi* lands as raiyats of the new purchasers. In 43 villages in which I have made enquiries on this point, I find that the total number of *muqadams* has increased from 156 to 401, i.e., by more than 150 per cent. and this notwithstanding that the natural increase has been checked by extensive sale. In 31 of the villages I find 105 heirs and 91 purchasers, whilst in 35 (dividing each village into 16 shares or *pans*), the number of shares held by heirs is 232 *pans*, 17 *gandas* 3 *koras*, and by purchasers 291 *pans*, 2 *gandas*, 1 *kora*, the heirs thus holding 44·4 per cent. to 55·6 per cent. held by the purchasers. These *muqadami* interests are never sold by the original *muqadams* except through necessity, and therefore the transfer of half the *muqadami* rights shows that the old *muqadams* are finding it hard to maintain their position. Many of the villages are bought up by large *mahajans* and by the land owners."

In Cuttack an examination of the *khewats* of three large Parganas containing many proprietary tenures give the following results:—

PARGANA.	No. OF TENURES IN THE PARGANA.		Number of tenures in which the zamindars hold shares.	Aggregate of zamindars' share.		
	At last Settle- ment.	At present Settle- ment.				
Asureswar	...	75	106	13‡	Rs. 7	A. 13 P. 6
Kato	...	94	120	68‡	36	11 5
Saibir	...	14	11§	11	9	13 9

* Villages, the rents of which are collected by proprietary tenure-holders.

† Especially the Chaudhris of Binjharpur, zamindars of *taluk* Saibir and of most of Sailo; and their cousins of Gajrajpur.

‡ Most of these shares are held by the Chaudhris of Binjharpur and Gajrajpur.

§ In the other three the zamindars have dispossessed the tenure-holders and hold the lands *Austabad*.

The figures quoted show only alienation to the proprietors of the superior estate and illustrate the great difference between the village tenure-holders of the protected Parganas of the interior, such as Asureswar, who have for the most part maintained their independence, and those of the flooded tracts of south Cuttack such as Kâte and Saibir, who are to a great extent in the hands of the zamindars.

An idea of the total number of transfers of proprietary tenures may be obtained from the following abstract of the returns of the Registration Department for the last ten years :—

DISTRICT.	Average yearly number of registered sale of the whole or portion	PROFESSION OF PURCHASERS.					Total amount paid as consideration.
		Traders and money-lenders.	Zamin-dars.	Tenure-holders.	Raiyats.	Others.	
1	2	3	4	5	6	7	8
Cuttack ...	2,095*	112	358	1,128	118	379	32,075
Puri ...	380†	48	15	228	103	52	67,206
Balasore ...	221	10	51	84	37	39	2,010
Total ...	2,696	170	424	1,440	258	470	1,01,321

* Nine years figures only

The figures are those shown under the head "intermediate tenures of all kinds," and appear to include *khurida jamabandi* and other non-proprietary tenures. Some sales of portions of proprietary tenures also fall under the head of 'other' tenures, which are not shown here. The figures show no marked increase or decrease in the number of transactions since the commencement of the Settlement.

When a share of a tenure is thus transferred the purchaser may or may not obtain actual possession of the land. In case of an amicable sale the deed usually specifies the *nijot* or *raiya* land transferred, and where the purchaser is a raiyat or cultivator he will sometimes be content with the possession of his share of such land. Oftener both a share of such land and of the right to collect rent passes, and in the case of sales to a *mahajan* or non-resident zamindar the latter gets generally only a share of the rents and the vendor holds on as a cultivator.

At the risk of being accused of want of sympathy I would say that the dispossession of the middlemen is, on the whole, a result to be desired. As a landlord the *muqaddam* generally collects higher rents than the big zamindars; and while he and his relations enjoy complete security of tenure in the best lands, he recognises no right of occupancy in his other tenants, and extorts from them the uttermost farthing. As a raiyat he is still strong enough to resist unfair enhancements, and with the help of the *khatians* he has been given may be trusted to enjoy the rights of occupancy which the law allows him.

One more point deserves special notice, and that is the fact that the law of merger has never been applied to these tenures. Indeed, in Orissa, such a principle has never been understood, and even in the papers of the last Settlement one may find the same man recorded as zamindar, as *muqaddam*, and as his own *thani* raiyat; and since then zamindars have even bought *miadi sarbarahkari* tenures in their own estates and held them as separate subordinate properties.

Had the principle of merger been enforced, the security of the revenue would have been much increased, for it is obvious that where one man is both *muqaddam* and zamindar, the value of the estate is decreased and the 'cover' of the revenue is only so much of the allowance as the proprietor gets *qua* zamindar.

Difficulty experienced in realising rents from proprietary tenure-holders.

299. Mr. McPherson who made special enquiries into this matter in connection with his report on the Kotdes estate writes:—

"It is the universal complaint of zamindars in whose estates there is a large *maurasi* area that the proprietary allowance granted to them in respect of the *maurasi jama* is quite insufficient to cover the expenses of collection and to safeguard the Government revenue. They state that the *muqadams*, *padhans*, and *sarbarakars* seldom pay their shares of the revenue until compelled by the institution of a suit in the Revenue Court, and that on account of minute subdivision of *maurasi* interests there is an infinite amount of delay and expense incurred first in securing a decree and second in executing it."

"I have discussed this subject in the special report on Kotdes estate because that estate comprises the bulk of the *muqadami* area, and one of the causes of the downfall of the old zamindars was alleged to be the difficulty of collecting from the *muqadam*. Three suggested alterations in the law were also discussed: (1) The extension of the Patni Regulations; (2) the extension of the Rent Sections of the Bengal Tenancy Act; and (3) the establishment of a Special Court for the more speedy disposal of rent suits."

"That the difficulty is not so universal as represented may be gathered from the following figures:—

"There are in the district, in all, 637 proprietary tenures in estates managed by zamindars. I exclude the *khas mahals* because the procedure in their case is different. The number of suits instituted by zamindars against proprietary tenure-holders for rent was 102 in 1894-95, 76 in 1895-96, 97 in 1896-97: average 92. That is zamindars found it necessary to bring suits against 14 per cent. only of the tenure-holders."

"In many cases these suits were brought not against the whole body of tenure-holders but against individual sharers. For convenience of reference I include in this report a copy of what I wrote in the report of Kotdes."

"300. The relations existing between zamindars and *muqadams* are governed by the provisions of Act X of 1859 and particularly by the provisions of sections 27, 32, 105, and 106 of the Act. Section 27 compels the *muqadam* to register in the zamindar's *sherista*

Extract from the special report on Kotdes, paragraph 6.

all transfers of, successions to, or divisions of, the tenure, and while obliging the zamindar to recognise such transfers, &c., empowers him to refuse recognition to any distribution or division of the rent payable on account of the tenure. In other words, whatever subdivision the tenure may be subjected to, the zamindar is enabled for collection purposes to keep the rent of the tenures undivided on his rent-roll. That is, he may refuse to accept a portion of the rent from any particular sharer whose name is registered. If he is wise he will leave it entirely to the *muqadams* to arrange amongst themselves for the joint payment of the full demand. If he does otherwise, he will find himself involved in legal difficulties when he attempts to realise the balance from other shareholders. If the demand is not paid up in full on the due date, the zamindar has recourse to a summary suit before the Collector. Granted that the zamindar's *sherista* is kept with ordinary care he will speedily and easily secure a decree for the arrear rent. He need only sue the parties, who have taken advantage of the provisions of section 27 and had their names registered in his own *sherista*. Having obtained his summary decree for the rent, the zamindar next proceeds to have it executed under the provisions of sections 105 and 106 of the Act. The tenure is sold by the summary process prescribed in section 4, *et seq.* of Act VIII (B.C.) of 1865. Nothing can be simpler or more effective than the above machinery for realisation from defaulters; nevertheless, it is alleged that the difficulty of collecting *muqadami* rents has been one of the principal causes of the downfall of the old Kotdes zamindars. The description which has already been given of the system of management or rather of mismanagement practised by the old zamindars will at once raise a suspicion that it was no defect in the law that led to their difficulties. The difficulties were of their own manufacture. In the first place, their *sherista* was in a condition of indescribable confusion. Being always in a state of hopeless indebtedness they accepted rent from any one who offered it, and their acceptance of rent then deprived them of the chance of proceeding against the tenure-holders jointly. They did not insist on due compliance with the registration provision of section 27. Not being able to ascertain from their *sherista* the names of actual holders of the tenures, they were compelled, before filing a suit, to ascertain these by local enquiries in the villages and by reference to the books in the Registrar's office. When suits were filed there were thus constant adjournments and dismissals on the plea of misjoinder, and, when successful, fresh obstacles, originating in the same confusion, arose at the execution stage."

"The creation of two independent collection establishments was a second and still more fertile cause of difficulty. It not only added to the confusion of the *sherista* as regards registration of names, but increased a hundredfold the difficulty of realising arrears from defaulters. The Act makes a radical distinction at the stage of execution between decrees obtained by the sole zamindar or the whole body of the zamindars and decrees obtained by a sharer in the estate. In the former case, the tenure itself may at once be sold by the summary process laid down in Act VIII (B.C.) of 1865, section 4, *et seq.* In the latter case, it is necessary to proceed first against the movable property of the judgment-debtor and failing this the under-tenure may be brought to sale "in the same manner as any other movable property may be sold in execution of a decree for money under the provisions of the two next following sections" (*i.e.*, according to the rules for the execution of decrees for demands, other than those of arrears of rent)."

"The sale in such cases is conducted according to the provisions of the Civil Procedure Code, and there arise complicated questions as to the exact effect of the sale; whether for example, the tenure itself, or only the right, title and interest of the judgment-debtor are passed. These questions around which a whole mass of case law has grown up, open out opportunities for all manner of delay, fraud and chicanery."

Suggested alteration in the law governing the relation of *muqaddams* and zamindars.

"It only remains to consider whether the machinery of registration and rent collection, simple and effective though it is, is capable of improvement."

"Three suggestions have been made:—

- "(1) The extension of the Patni Regulations (VIII of 1819, I of 1820, and (B.C.) Act VIII of 1865) to the proprietary tenures of Orissa
- "(2) The application to Orissa of certain sections of the Bengal Tenancy Act not yet extended.
- "(3) The establishment of a special court for the more speedy disposal of rent suits.

"The chief advantages which the extension of the Patni Regulations would secure to the zamindar are two in number: (a) He would be enabled on the occasion of transfers not only to secure a fee of 2 per cent for the trouble of registration, but also to take security for half a year's rent; (b) he would be in a position, twice a year, without the institution of a suit, to bring the tenure to sale after a very summary fashion, leaving the tenure-holder if aggrieved to bring a suit for the reversal of sale."

"An objection to all this is that the Patni tenure in its origin and incidents has nothing in common with the proprietary tenure of Orissa. The rights of a *muqadam* are only second to those of the zamindar himself, and the extension of the Patni Regulation seems to place him too much at the mercy of the superior landlord. It is true that the zamindar is responsible to Government for the land revenue of the tenure; and it is only right that as a collector of revenue he should be placed in a position independent of the action or default of the tenureholder. His responsibility will be, however, adequately safeguarded, and his independence secured, if he can invoke the aid of the Revenue Court on a sufficiently early date. For this it is only necessary to arrange that the rent of the *muqadami* tenure be payable on dates slightly in advance of those fixed for the payment of land revenue. If the zamindar has his *sherist* in reasonable order, to secure a decree and to execute it need not take more than three months, and as Government has hitherto granted the zamindar for his latest day of payment a respite of nearly six* months, and there appears to be no prospect of this period being curtailed, the difficulty seems to vanish."

"The portions of the Bengal Tenancy Act which have any application to the question under discussion are sections 12-17, sections 88, 93, 100, Chapters XIII and XIV."

"Sections 12-17 provide a more elaborate system of registration than is supplied by section 27 of Act X of 1859. They avoid the necessity of a suit before the Collector in case of the landlord's refusal to register and the landlord is compensated for his trouble by the relief of a fee. How far success has attended the scheme of late years in Bengal is not known to me, but up to 1888 it was not working satisfactorily. It is also a question whether, if the proposed system for the maintenance of land records in Orissa is introduced, any zamindari registration is called for. Arrangements will as a matter of course be made for the periodical revision of the tenure-holder's *khewat* and the zamindars will find no difficulty in ascertaining against whom a suit for rent should lie. The extension of section 88 of the Bengal Tenancy Act to Orissa is surrounded with difficulty. Certain Orissa tenures, the *muqadami* for instance, may be legally divided without the zamindar's consent. Again, section 27, Act X of 1859, already prohibits the division or distribution of the rent of the tenure without the consent of the zamindar."

"Sections 93 to 100, Bengal Tenancy Act, arrange for the appointment of managers in case of disputes between co-owners of estates and tenures. Their extension to Orissa would, I think, confer an extraordinary benefit on all classes of tenures. It has been shown above to what minute subdivision some of the tenures of Kotdesb have been subjected and how the interests of the well-doing and solvent are imperilled by the default of the careless and impecunious. The extension of these sections would appear to offer a solution of the difficulty."

"The extension to Orissa of Chapters XIII and XIV of the Bengal Tenancy Act would seem to be of doubtful utility. The procedure therein laid down for the disposal of rent suits is much less simple than already available in the provisions of Act X of 1859. It transfers rent suits from the Collector, who as the officer responsible for the land revenue of the district has most interest in the speedy disposal of the claims brought by zamindars against tenure-holders and raiyats to the Civil Court which has no such interest. It applies the provisions of the Civil Procedure Code to the execution of the decrees and would do away with the special facilities afforded by section 4, Act VIII (B.C.) of 1865."

"The only advantage which it would seem to secure to the zamindar lies in the abolition of the distinction between suits brought by sole or joint owners of the estate and suits brought by one of the co-sharers in the estate, a distinction which, as I have shown above, leads to difference at the execution stage. The advantage is in my opinion for the present very much outweighed by the disadvantages."

* Annex 8 of the demand becomes an "arrear of revenue" according to the old *tarikah* by the 1st of the latest day of payment is 24th April, the balance be given as "arrear" by 1st July and is payable on 24th Nov.

"A promising suggestion than either of the foregoing is that of establishing a Special Court for the disposal of rent-suits. So long as the rent-suits have to be disposed of in the leisure moments of an over-worked Deputy Collector, there are found to be numerous adjournments and much delay in the disposal of claims."

"Whether there should be a Central Court at Cuttack for the whole division or whether there is work enough to absorb the attention of an officer at the head-quarters of each district are matters for executive consideration."

301. The above account sets forth very fully the difficulties alleged by the zamindars of Kotdes and the means by which they may be met. And the same remarks apply more or less to all the large *maurasi** areas in the three Districts.

There can be no doubt but that the law provides very reasonable facilities for the recovery of rents, and that the difficulties are due chiefly to disagreement between co-sharers in the estates, owing to which they cannot sue jointly, and to failure to insist on proper registration. If a zamindar would only take the trouble to keep a register of his dependant *talukdars*, as required by section 27 of Act X of 1859, the difficulty of joining all necessary parties in the plaint could not arise; but they do not do so, and in Balasore Mr. Kingsford tells us that of 453 *sarbarahkars* in one estate only half had caused their names to be registered in the zamindar's *sherista*. Yet another cause of the difficulty is the unwillingness of the zamindar to bring the village to sale. If the zamindar is a sharer in the tenure, as is often the case, he could not sell it up without losing his own interest also, unless prepared to buy it in, and therefore he is often reduced to suing for a share of rent only and proceeding against the personal property of the defaulter.

As to the proposed remedies, the most drastic is no doubt the introduction of the Patni Regulations.

So long ago as 1831 Mr. Commissioner Stockwell pointed out the necessity for a more summary law of sale than then existed, and though he did not recommend the extension of the Patni Regulations themselves, he recommended that some analogous provision should be made. I do not myself share Mr. McPherson's objection to the Patni Regulations; it is true that the dependant *taluks* of Orissa are supposed to be of more ancient origin than the estates within which they lie; but the estates are liable to summary sale on default, and the tenures which under Regulation XII of 1805 were admitted to separate engagements have the same liability, and there does not appear to be any reason why a similar law should not apply also to the tenures still dependant.

On the other hand it is by no means certain that such strong measures are necessary. The number of suits against *muqaddams* and *sarbarahkars* for the recovery of rents in the Cuttack and Puri Districts are shown in the following table:—

YEAR				Cuttack.	Puri.*
1894-95	...	...	...	156	102
1895-96	...	...	...	143	76
1896-97	...	...	...	207	97
Total				506	257
Average				163	92
Total number of tenures				874	657

Excluding khas mahals.

The percentage of suits on the total number of tenures is 17 and of these suits many are for a share in the rent only; a very large proportion come from the estates of the Chaudhris of Binjharpur, the number of suits in the Kendrapara and Jajpur subdivisions of Cuttack averaging only 19 per annum.

The procedure in these cases is extremely simple. The new settlement records provide the zamindar with a record of the amount recoverable and of the persons liable for it, and he should have no difficulty in getting a decree for arrears; and the sale is made under Act VIII (B.C.) of 1865, as summarily as in

* The term *maurasi* is applied to the area of proprietary tenureholders as opposed to *hastabad*, the area in which the zamindar collects direct from his tenants.

the case of a *patni taluk*. As an alternative the zamindar can proceed against the person or movable property of the judgment-debtor.

He may also, under Act X of 1859, apply for the ejectment of the sub-proprietors, but perhaps this right has been taken away by the extension to Orissa of Section 65 of the Bengal Tenancy Act.

On the whole I do not consider that the difficulty of the present law, or the number of suits, is such as to require fresh legislation of the form of the Patni Regulations. Regulation VIII of 1819 could not well be extended, as Sections 3 and 4 do not apply to the dependent *taluks* of Orissa: the provision which would probably be of the greatest use is that of Section 5 for the recovery of a fee on mutations.

302. The second of the suggested remedies is the extension to Orissa of certain provisions of the Tenancy Act. These fall under five groups:—

- (1) Sections 12 to 17 dealing with the registration of mutations.
- (2) Chapter VIII dealing with the payment of rent.
- (3) Sections 83 to 88, sub-letting, relinquishment, or division of tenures.
- (4) Sections 97 to 100, appointment of common managers.
- (5) Chapter XIII, rent suits.

Before dealing with these I must refer to the question whether these sub-proprietors are indeed tenure-holders within the meaning of Section 5 (1) of the Bengal Tenancy Act. Mr. W. C. Macpherson, the Director of Land Records and Agriculture, when on special duty, set forth his views in the following terms* :—

"In supersession of the view expressed in paragraph 2 of my letter No. 15108, dated 9th June 1897, to the effect that it is necessary, under the provisions of Chapter X of the Tenancy Act, to settle judicial rents in the case of proprietary tenure-holders, I now wish to express the opinion that the *muqaddams*, *padhans*, *maurasi sarbarakars* and *maurasi purseths* of Orissa are not tenure holders within the meaning of Section 5 (1) of the Bengal Tenancy Act VIII of 1885. A perusal of the old settlement literature will, I think, convince that the *muqaddams*, *padhans*, *maurasi sarbarakars* and *purseths* did not acquire their rights from the *talukdars*, *chaudhies* and others on whom the status of zamindar and proprietor was conferred by Regulation XII of 1805. It will be remembered that Section 5 (1) of the Bengal Tenancy Act says that "tenureholder means primarily a person who has acquired from a proprietor," &c, also, that it is explained by commentators on the Act that the definition of tenure-holder given in this section is not exhaustive. It may be argued that as the *muqaddams* and other classes named are not proprietors within the meaning of Section 3 (2) of the Bengal Tenancy Act, they must be tenure-holders. On the whole, however, subject to the instruction of higher authority and subject to any ruling which may be given by the special judge, should the question be taken before him on appeal, I would recommend that the rents payable by the *muqaddams*, *padhans*, *maurasi sarbarakars*, and *maurasi purseths* should not be settled judicially under Section 101 (2) (a) and Section 107 of the Tenancy Act, but that they should be settled in the same proceeding with the settlement of the revenue payable by the proprietors."

The validity of the opinions here expressed has not been tested in the Courts; but in accordance with the suggestions made by the Director under the orders of Government and of the Board the payments to be made by these sub-proprietors or proprietary tenure-holders have been fixed under the regulations and *kabulyats* taken from them as from zamindars.

The effect of the application of the Bengal Tenancy Act to these tenures is however discussed in the following paragraphs on the supposition that it will govern them.

The provisions of Sections 12 to 17 of the Bengal Tenancy Act, regulating the registration of mutations in the landlord's books are more complete than those of Section 27 of Act X of 1859, and have the advantage of providing for the payment of a fee, and as such their extension to this Province has been recommended by most of the Assistant Settlement Officers consulted. On the other hand they are more complicated and, as far as my information goes, their success in Bengal is scarcely such as to justify any great expectations from their application in Orissa.

Chapter VIII of the Tenancy Act has been extended to this Province and its effect, if any, is to strengthen the position of the tenure-holder rather than

* Letter No. 140T.S., dated the 13th July 1897, to the Secretary to the Board of Revenue, Lower Provinces.

† This is generally true, but as I have shown that some at least of these tenures were created by *talukdars*.

that of the landlord, by taking away the latter's powers of ejectment (Section 65) and giving additional facilities for the depositing of rents in Court (Section 61). The power to award damages (Section 68) might, however, be used with advantage.

Chapter IX. of the Act contains a number of provisions as to tenant right. Section 80 has already been extended; the early Sections 76-79 may be extended and Sections 81, 82 and 83 are necessary to Section 80. Sections 84 to 92 are somewhat contrary to local custom. Sections 93 to 100 provide for the appointment of common managers and as the multiplicity of co-sharers both in the zamindari right and in the proprietary tenure is at the root of all the trouble, I am convinced that the application of these provisions should go far towards removing the difficulties.

Chapter X is in force in Orissa and only prescribes the procedure for Settlements.

Chapter XI which deals with the record of proprietors' private lands makes no provision for the lands held as *nijjot* by the village sub-proprietors of Orissa.

Chapter XII which amends the law of distraint would not apply to recovery of rent from these tenure-holders.

Chapters XIII and XIV transfer the trial of rent suits from Revenue to Civil Courts and prescribe a very simple and summary procedure. They enable execution to be taken out at the same time as judgment, but on the other hand sales must be made under the provisions of the Civil Procedure and room is allowed for legal difficulties which have no place under Act VIII of 1865. It appears, however,* that it would still be open to the zamindars to bring tenures to sale under that Act even though the Tenancy Act had been extended to Orissa in its entirety.

The third remedy, the establishment of a Special Court, seems to be scarcely justified by the amount of work, and there does not appear to be at present any serious delay in disposing of cases.

The following figures show the average duration in days of original suits and appeals in the Revenue Courts of the Cuttack District:—

YEAR.	IN LOWER COURTS.		In Appel- late Courts.
	Con- tested.	Uncon- tested.	
1894	71.9	44.71	38.93
1895	58.71	38.84	38.61
1896	66.3	42.7	37.8

303. The general provisions of the *kabuliyat* are the same as for zamindars

and affect the position of the sub-proprietors to exactly the same extent. Two of the clauses only, the 1st and the 11th, have any effect on the recovery of arrears by the zamindar.

In clause 1 is entered the *kistbandi* and it has been provided that the *muqaddam* or other proprietary tenure-holder shall pay in the same instalments—generally half and half—as the zamindar, but a month earlier, i.e., the first eight annas is recorded as due in February and is recoverable in March, and the second is recorded as due in September and recoverable in October.

At the last Settlement the kists were very variable and were often not entered, but those most commonly found are—

$\frac{4}{16}$ in <i>Kartik</i> (November)	|	$\frac{1}{16}$ in <i>Chaitra</i> (March)
$\frac{4}{16}$ <i>Mugh</i> (February)	|	$\frac{4}{16}$ in <i>Bysakh</i> (April)

Thus twelve annas of the rent would be payable and eight annas generally collected before the latest day for payment of the revenue of the first half year; the whole amount could be collected within six months. Under the *kistbandi* now entered half will probably be paid without any trouble in March, but the other half will fall due before the second half of the raiyats' rents can be called in and will probably not be paid until November, and that with difficulty. The disadvantage of the old *kistbandi* was that the zamindar had to meet half his revenue in November when he had spent most of what had been collected; the disadvantage of the new system is that the *muqaddam* may find it difficult to pay the second kist at the time fixed.

* Vide Mr. Justice Rampini's Tenancy Act, second edition, page 232.

If the ratio of instalments of revenue be altered as proposed to twelve annas and four annas the difficulty will disappear.

Clause 11 of the *kahtiyat* provides that on breach of the conditions of the former clauses the Collector may of his own motion or on that of the zamindar take over and manage the tenure. This rule is probably wide enough to cover the case of habitual default in payment, though it is not to be expected that a Collector will often find it advisable to have recourse to this provision in such cases.

304. Besides these proposed and actual remedies there is yet another which might have been, though it has not been, tried. I allude to the right to select one or more of the *sarba akhars* as the recorded manager of the village and to take engagements from him only, which was at the last Settlement laid down in the following terms* :—

"That if a *sarbarakari* tenure be found at the time of Settlement in possession of several joint *sarbarakars*, the Collector, with the concurrence of the zamindar, should select one or more of the body to be recorded manager of the *sarbarakari*. The *sarbarakars* selected and recorded cannot be ousted from their tenure, except for default of payment of rent, or for mismanagement proved to the satisfaction of the Collector."

This power has not generally been exercised in making the present Settlement, and in most estates all the numerous co-sharers have been allowed to join in executing *kahtiyats*, but I have lately been so strongly impressed with the difficulty felt by zamindars in realising the demand from these petty tenure-holders that I have recommended† that all the *kahtiyats* should be cancelled and fresh engagements taken from one or two of the principal *sarbarakhars*, who would be held liable for payment of the whole *jama*, and in the settlement of Parganas Saidabad and Jainabad the *kahtiyats* have been signed only by the *sarbarakhars* nominated by the zamindar.

It is only in the case of *sarbarakhars* that this right has been authoritatively declared, but it appears that Mr. Wilkinson made a similar selection in respect of the *pathans* of the Puri District‡, and I have the greatest faith in the efficacy of such a course.

305. On the whole, therefore, I beg to recommend—(1) extension of Sections 12 to 17 (inclusive) and 93 to 100 (inclusive) of the Tenancy Act to Orissa (2) That Government may pass orders as to cancellation of the recently executed *sarbarakhari kahtiyats* and may direct that *kahtiyats* be executed by one or more nominees of the zamindar (provided the nominees are recorded sharers). There will be no difficulty in doing this as *kahtiyats* have been taken by me in anticipation of and subject to orders of higher authority (see clause 9 of the *kahtiyat*). (3) That the attention of Collectors be drawn to clause 11 of the tenurholder's *kahtiyat*, and that they be directed to manage *khds* the tenures of habitual offenders. (4) That a complete record of all sharers in tenures having now been made, there is no reason for immediate action, but that Government should call for a detailed enquiry after five years with a view to legislation if necessary.

The subject is closely bound up with the introduction of the Tenancy Act in its entirety (see Chapter XIII.)

306. Certain questions submitted by the Director of Land Records and Agriculture and the replies given by the Government Pleader of Cuttack are annexed to this portion of the report :—

Answers to questions asked by the Director of Land Records and Agriculture in 1897.

Questions put by the Director of Land Records to the Government Pleader of Cuttack on 6th August 1897.

Answers to the queries of the Director of Land Records, &c., sent with the semi-official letter of the Settlement Officer of Orissa on 6th August 1897.

Will the Government Pleader of Cuttack kindly advise on the following questions :—

(1) Under what law and in what courts do zamindars recover rents or the revenue demands from *muqaddams*, hereditary

(1) The *muqaddams*, hereditary *sarbarakhars* and the like proprietary tenure holders are all sued in the Revenue Court for recovery of arrears of rent under clause 4, section 23 of Act X. 1883.

* Letter No. 1769, dated 25th September 1898, from the Secretary to Government to the Secretary to the Sader Board of Revenue.

† Letter No. 351 of 31st May 1899 to the Commissioner of the Division.

‡ Paragraph 44 of the late Babu Nundkishore Das' report on Land Tenures in Puri.

sarbarahkars and the like proprietary tenure-holders?

(2) Do any special difficulties attend such suits? i.e., in obligation to sue all co-sharers or take into execution against all co-sharers for separate sums or otherwise?

(2) The hereditary *sarbarahkari* tenures are not transferable and under the conditions attached to such tenures by the Government orders, dated 25th April 1838 (*vide* the correspondence referred to in Mr. Toynbee's History of Orissa, Appendix P. CLXIX) the hereditary *sarbarahkars* forfeit their *sarbarahkari* if they fall into arrears. So there is not much difficulty in recovering rents from them. And as such tenures are liable to forfeiture if the *sarbarahkars* sell or subdivide them without the consent of the zamindar, the *sarbarahkars* for the time being cannot introduce any co-sharer into the *sarbarahkari* without the knowledge of the zamindar. Consequently the zamindar has not got to find out who are the persons to be made defendants in suit for recovery of the arrears of rent. And as the zamindar can apply for their eviction from the *sarbarahkari* in the same suit for arrears, as provided for in section 78 of the said Act, a provision which he never fails to avail himself of, all the arrears are realised within fifteen days of the passing of the decree, as the *sarbarahkar* to prevent eviction generally pays up all the arrears within the said period prescribed by that section. But in the case of *muqaddams* and other proprietary tenure holders the difficulty of realizing the rent is very great indeed. Such tenures being what are called transferable ones, that is to say can be sold against the will of the zamindars. Whenever there is a transfer, neither the vendor nor the vendee cares to have the transfer registered in the zamindar's *sherista*. These tenure-holders are not required to obtain the zamindar's consent for subdividing their tenures, so the number of co-sharers are always on the increase, and when the zamindar has got to file a suit for arrears he must hunt up the books of the Registrar of Deeds and Assurances to find out the transfers since the last suit; if he does not do so, a plea of non-joinder is taken and then the zamindar has got to find out the names of the transferees. In cases in which the zamindar succeeds in making all the transferees, parties, sometimes it so happened that the return of the serving peon showed that some of the transferees were dead, then the zamindar has to find out in the best way he can the names of the legal representatives of the deceased co-sharers. Again where there are co-sharers, if the zamindar sues them all, some one or all of them take the plea that they paid their rents separately, hence the joint suit was bad, but when the zamindar sues them separately, the plea that he paid rent jointly with some one or more of the co-sharers is raised. In some cases in which the zamindar succeeded in getting an *ex parte* decree, and then proceeded to sell the transferable tenure, for which the arrears were due, a host of objections appeared in the execution department and objected to the sale; and in some cases compelled the zamindar to go to the Civil Court for having the judgment-debtor's interest in such tenure determined.

(3) Would it be advisable to make the provisions of the Bengal *Patni* Regulation applicable to recovery of rents by zamindars in Orissa from *muqaddams* and the like proprietary tenure-holders?

(4) Are *muqaddami* and *maurasi sarbarahkari* rights held by the courts to be divisible

(3) It would be certainly a great boon to the zamindars to make the *Patni* Regulations applicable to the hereditary transferable tenures which can be sold and subdivided without the zamindar's consent.

(4) *Maurasi sarbarahkari* tenures have been held by the High Court to be non-transferable.

without the consent of the zamindars? Must notice of division be given to the zamindars?

ble and non-divisible without the consent of the zamindar, and liable to forfeiture in case of defaults of payment of rent. The defaulting *sarbarahkar* can be evicted not only by an action under section 78 of Act X of 1859, but also by a regular civil suit. In the case of succession, if the successors do not get their names registered in the zamindar's *sherata*, a suit brought in the name of the deceased registered *sarbarahkar* was held not to be bad. The zamindars' interest is safe so far as the *maurasi* or temporary *sarbarahkars* are concerned. But *muqaddami kharida jammabandi*, *padhani sarbarahkari*, and similar other proprietary tenures have been held to be transferable and divisible without the consent of the zamindar. From what I have said above it is evident that no notice of any succession or transfer is ever given to the zamindar, and there is no law at present which makes it compulsory.

(5) Should section 88 of the Tenancy Act be made applicable to *muqaddami* and *maurasi sarbarahkari* tenure?

(5) It would be only just and proper to make the section 88 of the Bengal Tenancy Act applicable to *muqaddami* tenures with similar incident rights as to alienation and subdivision.

(6) Should the settlement Department take *kabuliyats* for payment of the revenue demand from all the co-sharers in *muqaddami* and *maurasi sarbarahkari* rights or only from those recorded in the zamindar's *sherata*, or may the Collector select particular *muqaddami* or *sarbarahkari* as persons with whom the settlement is to be made?

(6) In the case of the *maurasi* or temporary *sarbarahkars* the orders of Government during the last settlement were to take the engagement from one or more of the co-sharers as may be selected by the Collector, and the same thing may be done now. But such a thing, however desirable, would be inapplicable and illegal in the case of *muqaddami* and similar other tenures. So, as regards them, the whole body of co-sharers must engage for the tenure as in the case of zamindari.

(7) Will the Government Pleader please advise generally on this subject?

(7) For the tenures with proprietary rights, I think permission, similar to that contained in Act VIII (B.O.) of 1876, affecting the zamindari should be made, and some rule or law giving facility to the zamindar for realising rents from the holders thereof should be framed and made binding on the tenure-holders.

307. It is difficult to give accurate figures as to the value of proprietary tenures. In most cases definite plots are sold and the price depends on the extent and quality of the *nijchas* and may be very high. Where only the right to collect a share of the rents is sold the price is generally small. Mr. H. McPherson found that 19 *muqaddami* villages of Kotdes paying a *jama* of Rs. 6,627 sold for Rs. 91,840, i.e., for every Rs. 80 of *jama* representing an original allowance of Rs. 20 over Rs. 1,100 was paid. As a matter of fact assets had so increased that the profit left with the *muqaddam* averaged Rs. 54 per Rs. 80 of *jama* besides all extras realised in the form of cusses and contributions.

In ten *muqaddami* villages of Kotrahang the price paid was Rs. 1,153 for every Rs. 80 of *jama*. In 12 *padhani* villages of Lembai the average was Rs. 778; in 16 *padhani* villages of Chaubiskud Rs. 470; and in 17 *padhani* villages of Serai only Rs. 203 per Rs. 80 of *jama*.

The collections in the last two Parganas are uncertain. The price in the *padhani* villages is generally fixed at so much per *padhani bati* (=20 *mans*, or 8 acres) and in *muqaddami* villages at so much per *pan* (=1/8th share).

In Cuttack, figures compiled at attestation show an average price of Rs. 60 per acre, or about forty times the *jama*; this high price being of course paid for the *nijchas*. The figures in the completion reports are scarcely sufficient to generalise from.

308. It has been said that the proprietary tenure-holders were at the last settlement allowed to participate in the proprietary allowances, and the division between them and the Assessment of proprietary tenures.

zamindar in an ordinary estate in which 65 per cent. of the assets was taken as revenue was generally as follows :—

CLASS OF TENURE.	To tenure-holder.	To zamindar.
<i>Muqaddam</i> ...	20	15
<i>Sarbarahkar</i> (<i>Maurusi</i>)	15	20
<i>Ditto</i> (<i>Mindi</i>)	10	25
<i>Shikmi</i> Zamindars (a)	35	Nil.
" " (b)	25	10
<i>Padhan</i>	20	15
<i>Kharidakar</i> , first class	30	5
" second "	20	15

There were exceptions, as for instance in the case of some *miadi muqaddams* treated like *miadi sarbarahkars*, but the above shows the usual division.

If the allowances were only 30 per cent. the zamindar generally got 5 per cent. less; if it was 40 per cent. sometimes the additional 5 per cent. was given to the zamindar and sometimes to the tenure-holder.

In the present settlement the general rule has been, first to give to the tenure-holder the benefit of any increase in the rate of allowances on the estate; secondly, to allow some further reductions in his payments so as to prevent a loss of more than 20 per cent. of his income in the first two years, and after that 36 per cent.

The assets and revenue of the proprietary tenures are summed up in the following statement :—

DISTRICT.	MUFASSAL JAMA.			AMOUNT PAYABLE TO ZAMINDAR.				
	At last Settlement.	Existing.	Now settled	At last settlement.	In 1905 Amli (1898).	In 1906 Amli (1899).	In 1907 Amli (1900).	Final in 1910 etc. (Amli 1903 etc.)
	2	3	4	5	6	7	8	9
Cuttack	1,28,600	2,04,400	2,38,900	1,02,700	1,21,600	1,49,800	1,51,500	1,62,300
Balasore	65,100	1,03,700	1,19,400	54,100	69,300	78,800	79,100	85,800
Puri	2,11,600	2,67,200	2,92,500	1,70,900	2,06,100	2,15,600	2,21,700	2,24,000
Total	4,05,300	5,75,300	6,50,800	3,27,700	3,97,000	4,44,200	4,51,300	4,72,100

It will be observed that at the last settlement the proprietary tenureholders enjoyed a nominal income of only Rs. 77,600 or 19 per cent. of the *mu/assal jama*, before the revision of the settlement their profits had risen to Rs. 2,47,600 or had been more than trebled. They have now been reduced to Rs. 1,78,700 or 27½ per cent. on the *mufassal jama*, the reduction being spread over an interval of some five years, though the greater part was made in the first two.

The assets of the tenures represent about 16 per cent. of the total *mufassal jama* of the temporarily-settled estates of the Province.

309. *Mustajirs*, i.e., the holders of an *ijara* or farming lease, are mere temporary farmers of a village, and their rights are limited by the terms of the contract under which they hold.

Such a tenure is usually created for a specific period after which the farmer's connection with the land ceases, and even during the term of his possession he is liable to ejection for failure to carry out terms of the contract.

In large estates the leasing of villages to farmers for a term is very common, notable instances being found in *Killa Aul*, in Pargana *Dalijora* under all zamindars, in *Sailo* and *Deogaon* under the Chaudhris of *Binjharpur*, and in the *Khas Mahals* of *Puri* and the *Ward's estate* of *Kanika*. In *Balasore* the *ijara* system is usually found in the estates bordering on the sea-face.

As a rule *mustajirs* have not been recognised in the settlement papers, or if they have it is only by a note of the fact that the village is temporarily in the possession, (*hal dakhali*), of such and such a *mustajir*.

Perhaps the most important application of the system of management by *mustajirs* in the area dealt with in this report occurs in the Khas Mahals of the Puri District, and I here quote Mr. McPherson's description of the tenure and its treatment:—

In the Khas Mahals* (Rahang, Serai, and Chaubiskud) *mustajirs* have commonly had their names entered in the record of right, because the exact nature of their relation to Government, the temporary proprietor of these estates, was not quite understood by the revenue officer engaged in assessment. The entry of their names of course confers no right and does not entitle them to a renewal of their leases in the present Settlement. The Collector as manager of the estates in the event of continued recusancy, or the former recusant proprietor in the event of his engaging for the new revenue, is at liberty either to hold the villages in question *hastabud* or to continue the farming arrangement whichever may be the more convenient.

Of the manner in which these *mustajirs* have originated in the Khas Mahals I have written as follows in the Khas Mahal report.

It will here be convenient to notice a class which has in the course of settlement become numerous in all three estates—the class of *mustajirs*. *Mustajirs* are individuals to whom villages have been farmed out at a sum which leaves them a certain margin for collection and ordinary profits. They are in no sense of the term proprietary tenure-holders. It is a mere temporary arrangement of convenience. *Mustajirs* have sprung up in the following ways:—

- (1) In two villages of Chaubiskud and in seven villages of Rahang there were *mustajirs* at last Settlement.
- (2) In certain villages the admitted *pathans* and *sarbarahkars* of last settlement refused to execute *kabuliyats*. They lost their rights and the villages were afterwards farmed out to others.
- (3) In certain villages the *sarbarahkars* were dismissed for default and other reasons and the villages were granted on lease to others.
- (4) Some *hastabud* villages of last settlement have since been for convenience of collection let out in farm.
- (5) Some new villages have been created by alluvion, &c., and farmed out.
- (6) The person to whom fishery leases have been granted for specific periods have usually been denominated *mustajirs*.

In Cuttack, outside the permanently-settled estates but few have been recognised.

In Taluk Nagpur one '*istimrari mustajiri*' tenure (*Mauza Anka*) was recognised at the last settlement and treated as a *sarbarahkari* which it virtually is. In the same estate occurs another *mustajiri* tenure, *Mauza Gopalpur*, of which the holder claimed *sarbarahkari* rights at the last settlement but had them disallowed. As he had held ever since at an unchanged rent he has been recognised as *mustajir* and his rent has been settled at two-thirds of the assets of the village.

In *Killa Aul*, a permanently-settled estate, nearly all villages were let out in farm to *mustajirs*, whose engagements were renewable every fifth year. They had no right to the profits of new cultivation nor to the control of rent-free and *jagir* tenures, but made their own terms with the raiyats. Within the last few years they have been dispossessed and the whole estate is held *hastabud* by the Raja. In *Dalijora* also during the settlement operations nearly all the *mustajirs* were turned out.

In the Balasore District, in Taluk Shergarh Batitanki, the tenure of the Pandas of Khantapara has been upheld against the zamindars by the High Court and recognised in this Settlement.

I have examined the collection papers of the *mustajirs* in Ankura and Bhera. They appear to take from the zamindar an agreement for five years to pay the full demand, e.g., the product of the whole cultivated area and a rate of not less than Rs. 2-2 per acre. In a good year the *mustajir* exacts Rs. 2-6 per acre from the raiyats and pays Rs. 2-2 to the zamindar. In a bad year the raiyats pay at least Rs. 2-2 per acre and any arrears are carried over till they can be realised in the next good year. The *mustajir* has to pay Rs. 2-2 per acre to the zamindar all years, good or bad.

In the Khas Mahals of Bichitrapur and Nounand certain intermediate tenures have been created; the former for the reclamation of jungle lands, and the latter owing to disputes with neighbouring estates.

* Properly speaking, not khas mahals, but recusant estates. They have been engaged for by the proprietor in the present Settlement.

Farmers and all middlemen who are not hereditary headmen, almost invariably rack-rent the tenants; and it is very undesirable that the practice of creating such intermediate tenures should receive any countenance from the action of the State in its Khas Mahals.

310. Primarily all lands within the *moghulbandi* were liable to pay their quota of the Government revenue, but Hindu princes and Mahomedan emperors, and to some extent their deputies and representatives, exercised the right of assigning grants of land to temples, shrines, holy men, old servants, and others to be held free of revenue temporarily or in perpetuity.

The British Government, on their conquest of the Province, respected the claims of persons holding under grants from duly constituted authority, or with long possession, and after elaborate enquiries during the period 1836 to 1845 about 3,22,000* acres were confirmed as revenue free to the holders, who are known as *lakhiraj bahadars* or confirmed revenue-free holders. A full account of the origin and nature of these grants is given in Chapter XXIII of this report; here it is sufficient to describe the incidents of the tenures.

Primarily, the grants are divided into classes; absolute gifts to individuals, and gifts of land to be held in trust for a religious or charitable purpose. I will treat of them separately—

A. Grants to individuals such as, *Brahmottar, Pirottar, Dan, Muafi Kharida &c.*

1. The property is permanent, and not liable to any contribution to the public revenues, except in the form of cesses, which it pays equally with revenue-paying estates.
2. It is heritable according to the personal law of the proprietor.
3. It is transferable, and divisible without restriction.
4. The proprietors can create permanent or temporary tenures, and their relations with their tenants are subject to the same law as those of zamindars of revenue-paying estates.

B. Grants in trust, such as *Debottar, Amrita Mandhi, Ekhrayat, Khairat*: These grants are mostly held under the Hindu law, but there are also not a few under the Mahomedan law of *wakf*.

The incidents of the Mahomedan and Hindu properties do not appear to differ very greatly; in either case the land is usually regarded as the property of the shrine, temple, mosque, or *dharmashala* for the maintenance of which it was granted. The lands are managed and the fruits thereof enjoyed by a *marfatdar*, or agent, who has a permanent and heritable interest, subject only to the obligation to discharge the duties of the trust. The lands are neither partible nor transferable.

In the case of a Hindu temple the place of the *marfatdar* is usually taken by a *shebait* or priest, whose office descends to his disciples. Sometimes there is both a *marfatdar* and a *shebait*, in which case the latter is simply priest and the profits of the land over and above the temple charges go to the former. It is common, too, to find a zamindar entered as *karjyadhaykhyia* or 'supervisor of the work,' the only effect of the entry being a power to remove a dishonest trustee or compel him to spend the money properly. Such a power was probably inherent in all the superior *talukdars* and zamindars and has been exercised by village headmen, but in the majority of cases more supervision is needed if the profits of the land are to be put to the purposes for which they were intended.

Though in law these lands are neither partible or saleable, they are in practice transferred by deeds called *Samarpanpatra* or 'deeds of trust' which without any transfer of the land itself convey to the purchaser the title and interest of the vendor.

When not attached to a place of special sanctity it is common to find a large number of *marfatdars* in separate possession of different portions of the land, which they treat as their freehold property.

These trust lands are, like those which are the absolute property of the grantee, permanently exempted from the payment of land revenue but liable to pay the cesses proscribed by law. On failure of heirs both classes of estates escheat to Government.

* Taken from the reports on Orissa tenures, excluding *Peskas Mahals, Khurda, and Panchgarh*.

Hitherto both classes of revenue-free estates have been considered to form part of the *taluks* out of which they were carved, though the only practical application of this theory was that the road and public works cess was recovered by Government through the zamindar of the *taluk*,¹ but in the present settlement they have been treated as independent estates. The total areas in acres of such properties in each of the three districts as recorded in the papers of this settlement are as follows:—

District.	Debottar. ² Acres.	Brahmottar. Acres.	Piottar. Acres.	Others. ³ Acres.	Total. Acres.
Cuttack ...	65,400	41,700	4,900	21,400	1,33,400
Balasore ...	60,000	34,000	4,700	10,200	1,08,900
Puri ...	71,700	11,300	2,000	7,600	92,600
Total ...	1,96,100	87,000	11,600	39,200	3,34,900

311. In addition to the revenue-free properties found in existence at the last settlement there were numerous tenures held at a quit rent or *tanki* of one to three rupees per *bati*.⁴ They consist of both *brahmottar* and *debottar* land and were generally held by Brahmans who enjoyed, subject only to the payment of the trifling rent, all the privileges of *lakhirajdars*. It is commonly asserted⁵ that these tenures were originally rent-free and were assessed by the Rajas when they were hard up for money, or by the Moghuls and Mahrattas. This however was probably not always the case, and I have heard it said that the founders of Brahman villages had some religious objection to making the grants wholly free of assessment. Be that as it may, the tenures were at the British conquest paying a quit rent, and at the last settlement their title to refuse enhancement was enquired into on exactly the same lines as were claims to hold land revenue free, the most marked difference being that with but very few exceptions⁶ no *tanki* tenure, resumed or confirmed, was made into a separate estate. In the resumed or *tanki bazyasti* tenures the rents were fixed nominally at half rates, the proprietor through whom it was paid getting 10 per cent. for the cost of collection. The position of these tenureholders is exactly the same as that of the *lakhiraj bazyastidars*, who will be more fully described in paragraph 313. The *tanki baháldars* whose tenures were confirmed hold and will continue to hold at the quit rent they were found to be paying at the time of the conquest. They are permanent tenureholders having a heritable and transferable right, and can sell or mortgage the whole or any part of their tenure and exercise over it all other proprietary rights, subject to the general limitations to the treatment of trust lands where the land was granted for the support of a religious or charitable institution. They cannot however divide the rent without the consent of the landlord⁷, and for failure to pay the rent the tenure is liable to be sold up under section 105, Act X of 1859.

Mr. McPherson gives the following account of two small classes which have been treated in the same way as *bazyasti tankiddars*:—

They are *hetá tankidars* and *khandait tankidars*. The origin of the *hetá tankidars* tenure is somewhat obscure. It occurs only in the four Parganas⁸ in which the *tanki bazyasti* tenure is common. The *Padhans* and *Bhois* of these Parganas at one time held *jagirs* instead of getting money commission on collections. In some villages where the services of the *Padhans* and *Bhois* were dispensed with, they were allowed to continue in possession of the *jagir* lands, but the lands were settled with them as *Padhans*. That is, the lands were assessed, the parties in possession were allowed a deduction of 20 to 25 per cent. and the *Padhani* right was conceded to them. In other cases the resumed lands were included in other *padhanis*. The *khandait tanki* tenure occurs only in Pargana Chaubiskud, taluk Krishnachandra. There is a village called Rendha adjoining the sandy belt which stretches from Puri Town to the mouth of the Chilka. The *khandait* of Rendha was an officer who enjoyed a large quit-rent *jagir* situated at Rendha, in return for which he had to perform police and *chaukidari* duties along the sands

¹ Act IX. (B.C.) of 1880, Chapter VI.

² Includes *Amrita Manahi*.

³ Mostly *khasirs*.

⁴ The late Babu Nandakishore Das' report on the Puri Tenures, paragraphs 88 to 94.

⁵ *Báti* = 20 *masas* = from 8 to 20 acres. *Tanki* is said by Birling to mean *assignment*. Possibly a corruption of *Tankiddá* the word used in Todar Mal's assessment.

⁶ Mr. Wilkinson's Settlement report of Khurda (paragraph 16).

⁷ I find taluk Harakrishnapur Pargana Bahang, and two permanently-settled estates bearing (*tanis*) Nos. 1853 and 1853 in Cuttack.

⁸ Section 27, Act X, of 1859.

⁹ Lemba, Chaubiskud, Serai and Bahang.

belt. The old road from Ganjam to Puri used to pass along this. The *khandait* had *paiks* under him who held portions of the *jagir* as their remuneration. The *jagir* has now been resumed.

312. Another class of *tanki* tenures known as *rafa-tanki** appear to be confined to the Khurda subdivision and need not be here described, but some account must be given of the *Sāsant*† villages that form so interesting a feature of the Puri land system.

These villages appear to have been founded by groups of Brahmans from the west who were brought to Orissa by the Hindu kings and continued to hold the villages at a *tanki* rent on *sanads* from the Raja of Khurda or the Mahrattas.

The assessment made was on the total cultivated area of the village, and so long as the whole amount was paid into the treasury the village community were at liberty to make their own arrangements for its distribution. They paid the revenue through elected representatives called *reportdars* who at the last settlement entered into engagements with the Government on behalf of the individual tenurholders, but on default the whole village was liable to be brought to sale.

These *Sāsants*, or Brahman settlements, appear to have existed in the Pargana of Jajpur and around Bhadrak as well as in the Puri District, but it was only in the parganas of Lembai, Sorai, Chaubiskud, and Rahang that we find them officially recognised at the last Settlement. The head of the *sāsan* and keeper of its title deeds, rent receipts, etc., is generally known as the *Pānigrahi*.

The Parganas Sorai, Chaubiskud, and Rahang have for the most part been for eighty years managed by Government on behalf of the recusant proprietors and the tenures still subsist though the *reportdars* system has fallen into disuse and the Collector deals directly with the tenants. About twenty years ago *tahsil amins* were appointed by the Collector in some villages with the consent of the *tankidars*. They collected the quit rent proportionately from the *tankidars* and with it a small additional sum to cover the cost of collection, and were empowered to take out certificates against defaulters. The system was, however, found to lead to delay in realisation of the rents and complicated accounts, and after a few years was abolished.

In the present Settlement separate rents for each tenant have been fixed in the *bazyasti tanki* villages and the lands and rents of *bahai tankidars* recorded, and it has been decided to abandon the right to sell the whole village for default and to make collections from individual *tankidars*.‡

313. When the British took over the Province all persons claiming to hold property *lakhiraj*, or free of payment of revenue, were invited to register their claims in the office of the Collector with a view to an investigation of their title under section 18 of Regulation XII of 1805. Over 150,000 claims were registered, but there was no machinery capable of dealing with them, and it was not until the settlement of 1838 that systematic proceedings began to be taken under the Resumption Regulations XII of 1805, II of 1819, and XIV of 1825.

The terms to be offered to the holders of the resumed lands formed the subject of much correspondence between the local and the central authorities, the former urging the claim of the people to lenient treatment and the Government, while deprecating any undue severity, insisting on the proper investigation of all titles under the Resumption Regulations. The substantive provisions of the law are to be found in Sections 18 to 29 of Regulation XII of 1805 and may be summed up as follows:

- (1) That no grant, by whatever authority made, was valid unless possession had been obtained before the 14th October 1803.
- (2) That all grants made before the 14th October 1791 were to be deemed valid.
- (3) That all royal grants made before the 14th October 1803 and all grants expressly recognised or admitted by Government before that date, were to be deemed valid.

* Tankidars who agreed (by *rafa*) to have their rents enhanced at every settlement by as many annas in the rupee as the rents of raiyats were enhanced.

† See my letter No. 238, dated 27th January 1899 to the Commissioner.

‡ Government to Board No. 520T.—R., dated 14th June 1899.

- (4) That grants of land not exceeding 10 *bighas* of which the proceeds were *bond fide* devoted to religious or charitable purposes should be confirmed.
- (5) The revenue assessable on all lands not adjudged to be lawfully held free of revenue under the above provisions was declared to belong to Government and was to be regulated by the rules in this and the subsequent Settlement regulations.

The right to hold at half rates in perpetuity granted to the holders of resumed lands in permanently-settled parts of the Province by Section 8 of Regulation XIX of 1793 did not extend to Orissa, but in order to reconcile the people to the sudden resumption of their lands, it was decided that all who had been in possession since the date of the conquest might be allowed to hold at half rates for the term of the thirty years' settlement.

In letter No. 178 of the 7th February 1837 to the Government of India, the Deputy Governor of Bengal declared his policy in the following terms:

On the Governor's judgment, the just rights of the State will be most easily reconciled with consideration for the claims or feelings of those whose lands are annexed to the rent-roll of the Province by the operation of the Resumption laws, by allowing to all parties who have enjoyed long possession of immunities of the nature in question, and whose tenures have been held in good faith, very indulgent terms of assessment during the thirty years' settlement which it is proposed to form, provided always that such indulgences may be withheld from parties who by frivolous appeal or litigious conduct oppose themselves to this lenient assertion of the just rights of Government.

In order to encourage such acquiescence by a definite tender of favourable terms, it might be publicly notified throughout the Province that for the period of Settlement above mentioned only half the rent paid by raiyati land of the same quality in the same mahal will be demanded from lakhirajdars not excluded by the above proviso.

Such a declaration on the part of Government would doubtless go far to quiet apprehension and to induce cheerful submission, and the sacrifice of revenue would be confined to thirty years, a less term than has passed since our acquisition of the Province; all such temporary reductions will of course be carefully recorded, in order to its enhancement, if necessary, at the close of the period of settlement, without involving the necessity of fresh measurements and general assessments.

A still greater modification in the direction of leniency was made by the rules of 1841,* which allowed the privilege of holding at half rates to all who could prove possession since the conquest, and greatly lessened the strictness of proof required from claimants to a *lakhiraj* title, and the rules were given retrospective effect and former resumption proceedings revised.

314. Under the Bengal Regulations,† rents assessed on all resumed lands of less than 100 acres in extent belong to the proprietors of the permanently-settled estates within which such lands were situated. This provision however did not extend to Cuttack, and Regulation XII of 1805 and Section 3 of Regulation II of 1819 clearly showed the revenue assessed to belong to Government. For convenience however it was decided that the revenue assessed on all resumed tenures having an area of less than 75 acres should be payable through the *zainindar* (and the *muquddams* if any) of the Mahal within which the lands lay, and that the latter should receive exactly the "same pecuniary immunities" as they were entitled to in the case of raiyati lands.

The following extract from the Government orders passed in connection with the settlement of Taluk Malipara‡ will show the opinion of the authorities at the time of the last Settlement:—

The Governor does not agree with Mr. Mills, nor altogether with Mr. Commissioner Ricketts in regard to the claims of the zamindar to *malikānā*, and of the *muquddams* to compensation on resumed *lakhiraj* lands.

At the same time it is evident that with respect to small patches of land not exceeding a few *bighas* in extent, it is most desirable that the revenue of Government should be collected from the dispossessed *lakhirajdars* and paid in the public treasury by the party responsible for the revenue of the estate within the general area of which such petty holdings are situated; and it is equally clear that though *malkānā* be ostensibly denied in the first instance as that to which the sudder *malguzar* in the supposed case has no lawful claim, such an allowance must be made to that party for the trouble and risk of collection as may make it both worth his while to undertake it and may enable him to stand up against the contingency of untoward seasons.

Further, it seems certain that ere the period of the settlement now about to be made has expired all distinction between resumed *lakhiraj* and common raiyati lands will be lost.

* See paragraph 567.

† Section 32, Regulation XIX of 1793.

‡ Governor to Board No. 1749, dated 29th November 1836.

In accordance with these orders the proprietors and *muqaddams* received on the rents of resumed lands assessed at full rates the same percentage of allowance as on the raiyati lands of the estate. In the case of lands assessed at half rates, they received 30 per cent. on the half rent; this allowance being divided in equal shares, or in the proportion of one-third to two-third between the zamindar and the *muqaddam* or *sarbaráhkár*, if any.

Zamindars and *muqaddams* were not entitled on rescusancy to any *malikana* in respect of the rents of these resumed lands, and in the case of estates settled previously to the completion of the resumption proceedings were allowed to refuse to take settlement of the resumed land. From 1838 onwards, however, when the settlement and resumption proceeded simultaneously, the zamindar was required to undertake for all *khalisa** lands old and new (*i.e.*, resumed) in a lump or to recuse altogether.†

The tenures assessed at half rates are called *adhajama* or *nisfi bazyáfti* or vulgarly simply *bazyáfti*; those paying full rents are called *pura jama* (full rent) or *kamil* (perfect, or complete) *bazyáfti* and the holders are commonly described as *kamildars*.

315. The *bazyáftidars* are for the most part Brahmans, and look upon

themselves as proprietors rather than as tenants, and indeed to this day often describe themselves as *lakhirajdars*. They can sell the whole or any part of their property, can plant trees, build houses, and exercise all ordinary proprietary rights, but without the zamindar's consent they cannot divide the rent or the liability for it, and many zamindars exact a mutation fee before recognising a new purchaser. Compensation for acquisition of the land for public purposes has hitherto been paid only to the *bazyáftidar* and not to the zamindar.

They form the village aristocracy and are most undesirable tenants, as they do not generally cultivate the land themselves and are most remiss in the payment of rent, while the sanctity of their caste makes the petty zamindar unwilling to proceed to extremes and sell up the tenure; the big non-resident landowners have fewer scruples and generally collect the rent except where the amount is very petty.

To a very great extent the difficulty is in the case of estates still in the hands of the original proprietors nominal, for they and their relatives will generally be found in possession of a large number of the *bazyáfti* tenures, which they value almost more highly than their zamindari right; and even if the estate is sold for arrears of revenue they continue to hold the *bazyáfti* land and are then the most troublesome of all tenants.

The *kamildars*, where they are Brahmans, are in a very similar position and for the most part have, contrary to the expectations formed at the last settlement, kept themselves wholly distinct from the cultivating raiyats; but the more highly assessed tenures owned by persons of less sanctity or with weaker claims, and the resumed *jagirs* held by men of the cultivating and artisan castes, have to a great extent merged in the general body of the raiyati land.

316. Separate figures have not been compiled for all the different classes

of privileged tenures, but they have been generally classed under three main heads—those who formerly held at half rates, those who hold at nominal full rates, and those who got intermediate allowance as the *kharida* tenure-holders.

The enhancement in the present Settlement has practically obliterated the distinction. The following statement shows the particulars of these tenures at the last and at the present Settlements:—

CLASS OF TENURE.	LAST SETTLEMENT.				PRESENT SETTLEMENT.			
	Area.	Rent.	Incidence.	Number.	Area.	Rent.	Incidence.	
	Acres.	Rs.	Rs. A.		Acres.	Rs.	Rs. A.	
<i>Kharida jama-bandi.</i>	45,400	43,800	0 15	27,000	47,400	65,800	1 5	
<i>Nisfi bazyafi and Tanki.</i>	2,21,300	94,600	0 7	1,83,500	2,32,400	2,38,500	1 0	
<i>Kamil and Jagir Bazyafi and other tenures.</i>	80,900	69,000	0 13	50,000	58,000	66,700	1 5	

* *Khalisa*—lands in the possession of the zamindar as opposed to *lakhiraj* and alienated lands.

† Board to Government No. 543 of 11th September 1838.

‡ The two names mean the same, *i.e.*, 'half rent resumed' the former being the Hindi and the latter the Persian name.

Incidents of Resumed tenures.
up by Mr. McPherson :—

317. The incidents of the *kharida jamabandi* the *bazyasti* and the *tanki* tenures are thus summed

- (1) They are heritable.
- (2) They are transferable.*
- (3) They are divisible, but no division of rent is binding on the landlord without his consent (section 27, Act X of 1859).
- (4) The tenure-holders have the same rights over waste land included in their tenures as zamindars have in the waste land of their estate—that is, a full right to the jungle produce and to the profits of reclaimed lands. Any lands brought under cultivation in the course of the settlement are of course liable to assessment at next settlement.
- (5) The rent payable is fixed for the term of settlement.
- (6) In default of payment the tenure may be brought to sale under section 105, Act X of 1859. The balance of the purchase money after paying the arrear rent goes to the defaulter.
- (7) These tenures do not, on purchase by the zamindar or other landlord, merge in the superior right, but by the custom of the country survive, and are not rendered void by the sale of the zamindari.

318. Separate figures are not available for *bazyasti*, *kharida*, and *tanki* lands, those compiled in the settlement camps during attestation being too meagre to form a safe basis for any conclusion; neither can they be easily had from the returns of the Registration Department, as they are inextricably confused with revenue free properties and proprietary tenures. In Balasore, Mr. Kingsford gives the following figures, and for Cuttack and Puri I roughly estimate the transfers of *bazyasti* at one-third of the total number shown under the head of revenue free :—

DISTRICT.		Average number of transfers per annum.	STATUS OF PURCHASERS.					Total purchase money.
			Mahajans and money-lenders.	Zamin-dars.	Proprietary tenure-holders and baryastidars.	Raiyats.	Others.	
Cuttack	...	470	27	63	272	20	78	7,800
Balasore	...	836	45	139	453	136	63	58,360
Puri	...	120	7	12	32	12	67	18,700
Total	...	1,426	79	214	757	168	198	84,800

It will be seen that the transactions are very numerous and that they involve the payment of large sums. About half the sales are to other persons in the same class, a good many purchases being also made by zamindars, but comparatively by money-lenders or traders.

There does not appear to have been any marked increase in the number of transactions during the last decennial period, and it may be assumed that the settlement has had but little effect. Figures as to the price paid per acre are not available in the registration returns, but from the figures compiled during re-attestation I find that the price paid varies in Cuttack from Rs. 27 to Rs. 141 per acre, and averages Rs. 69 for *bazyasti* and Rs. 97 for *kharida jamabandi* lands.

In Balasore Mr. Kingford puts the average price before the recent enhancement of *bazyasti* rents at Rs. 40 to Rs. 80 per acre, and now at Rs. 50 to Rs. 55 per acre.

319. In the earliest times of which we have any historical knowledge we find the cultivators broadly divided into two groups—the *Thani* or resident and the *Pahi* or non-resident. *Thani* raiyats† were the burgesses of the village. Their houses they held rent free; for their ancestral lands they paid a fixed rent determined by custom or the decree of the ruling power. They had a voice in the

* Subject to the legal restrictions on alienation of *debottar* land.

† From the Sanskrit *sthaniya*—the place." Also known as "*Khadkash*."

distribution of land by the headmen, and could take up and cultivate at privileged rates any field lying waste or in the possession of a non-resident raiyat. In the case of rent-free grants situated within his village, the property of priests or others who could not hold the plough themselves, the *thani* raiyat had generally the preference as under-tenant or *metayer*. He had, in common with his brother guildsmen, the right to use the pastures, the thatching grass and the fire-wood jungle. His right of occupancy was hereditary, and his credit with the village money-lender stood higher than that of the nomadic raiyat who had nothing to lose by absconding. For all these privileges the *thani* raiyat paid very highly, as it was on him that every increase in the land revenue ultimately fell. The *pahi* raiyat in those days when land was plentiful could oppose a demand for an increased rent by simply throwing up his holding. This the *thani* raiyat could not do without forfeiting his home, his position, and all that was most dear to him, so that he generally stayed and paid unless he was strong enough to resist the claim for enhancement. In this connection I would quote the following passage from Mr. Stirling's Minute paragraph 66 on the land tenures of Orissa:—

It appears to me a clear established principle in Cuttack, and it is scarcely denied by any whose notions of landed property have not been altogether newly modelled by the British laws and regulations, that the superior holder, whether *maguddum* or *taluqdar*, has no shadow of a right to dispossess the *thani* raiyat from his land so long as he pays the rent demandable, and also that that rent was formerly fixed by Act of the Government on consideration of the quantity of soil tenanted by each, its produce and value in reference to which the zamindar's payments have been adjusted and consequently that he has no title whatever to require an increase. The unprosperous state of the raiyats, however, for a long series of years must necessarily have introduced numerous alterations and fluctuations. Where a resident cultivator has broken down from misfortune or oppression, the zamindar must of course lower his rents temporarily, if he wishes to prevent his absconding or starving; a relief which would render him liable to an equivalent subsequent increase; and when a cultivator cannot or will not pay his rent, it has been at all times customary to make over temporarily his lands to any other person who may be willing to take charge of them. The interests of the raiyats are too little understood in Cuttack to enable me to say what period of recusance to cultivate or inability to pay would involve a final forfeiture of the title of fixed occupancy, supposing it could ever be the interest of the zamindar to impose such a penalty. With respect, too, to the payment of a fixed *jamabandi* or quantum of rent for the same quantity of land, the advantage is merely nominal, as the person who collects has long exercised the power of imposing additional burthens in a variety of shapes and names, which the raiyat cannot resist the payment of; and many of which become in the course of years consolidated with his established rates.

The British conquest made no difference to his rights, and the settlement of 1836 only stereotyped them by supplying an accurate record of the *thani* lands and of the rent that could be lawfully demanded for them.

An attempt was made in the early stages of that settlement to adjust the rents with reference to the quality and productive power of the land, the fair rent being assumed to be half the net value of the produce; but after much correspondence this attempt was abandoned and existing rents were generally accepted, enquiries being made into the case specially high or specially low rents. In some estates* too, where the rents appeared exorbitant their whole level was altered by the higher authorities and a fair average rate fixed by a stroke of the pen. So every raiyat was given a lease showing his lands, his rent, the period for which it was fixed and the land left unassessed (*minha*) and the possession of his *patta* gave to the holder almost entire immunity from illegal demands or dispossession.

The general result of the last settlement (so far as *thani* raiyats are concerned) was summed up by Mr. Mills in 1847 as follows:—

There was no difficulty in ascertaining the actual rent paid by the *thanis*, as it was notorious that they were almost invariably assessed at a rate infinitely higher than the produce of their lands or other concomitant advantages of residence could enable them to pay.

(See my No. 2776 of 31-12-97, Appendix A, No. 13 to this report).

The next step in the development of the rights of tenants was the passing of Act X of 1859, which was intended to substitute for the old division between *khud kasht* and *pahi kasht* that of resident and non-resident raiyats, giving to all who could prove occupation for twelve years a right of continued

* As in taluk Chaudakulát and Pargana Jaipur.

occupancy. This however the *thani* raiyat already possessed, and the Act only affected him in so far as it defined the procedure to be followed by his landlord for the recovery of arrears of rent.

Incidents of the *Thani* tenure.

320. The incidents of the tenure as they stood after the passing of this Act appear to have been as follows:—

- (1) A right of occupancy so long as the rent was regularly paid. If at the end of the year the rent remained in arrears the zamindar could bring a suit for the tenant's ejectment, and turn him out if the arrears were not paid within fifteen days of the date of the decree (Sections 21 and 78, Act X of 1859.)
- (2) Right to the produce of all crops and the fruit of all trees growing on his land.
- (3) Right to the use of the village pasture land and to take fuel from jungle.
- (4) Fixity of rent for the term of settlement: this was secured them by their leases.
- (5) Right of inheritance according to the Hindu law. The land could be divided among the heirs, but the landlord was not bound to recognise any division of the rent (Section 27, Act X of 1859).
- (6) The tenure was not transferable by sale or gift.
- (7) The raiyat could surrender his holding by giving notice of his intention in writing to the landlord, or his authorised agent, before the month of *Chaitra* of the year preceeding that in which the relinquishment was to take effect. If he failed to give such notices he was liable for the rent of the land for the ensuing year (Section 19, Act X of 1859).
- (8) He was not entitled to remission of rent on account of damage by flood, drought, or other calamity, unless a provision to that effect was entered in his lease. Such provisions were found in Parganas Rahang, Serai, Chaubiskud, and Lembai of Puri.
- (9) The tenure was not vitiated by sale of the parent estate for arrears of revenue or otherwise, and could only be terminated by the relinquishment of the raiyat, by his ejectment, by his accepting a permanent reduction of rent, or by unauthorised alienation of the land.

These conditions subsist practically unchanged up to the present day, and the only conditions that are open to discussion or require any special comment are the sixth and ninth. The right to the fruit of trees and the use of pasture lands will be considered when treating of raiyats in general. As regards the eighth condition Mr. Wilkinson is responsible for the existence of the provision referred to. We find it also in Khurda.

Transfer of *Thani*.

321. In paragraph 67 of his Minute of 1821, Mr. Stirling writes:—

After the most careful enquiry I have been unable to discover any instances of a royt selling or mortgaging his lands, nor can I meet with any one who thinks they possess such a right, or is aware that such has ever been exercised in practice.

No enactment has ever given to the raiyats the power of alienation that they did not then possess, but sales are very common indeed, and several Assistant Settlement Officers have expressed an opinion that they can be made without the zamindar's consent. Mr. Stevenson, when Collector of Cuttack, expressed the opinion that *thani* holdings are now transferable, basing his conclusion on the Cuttack District Judge's order in Appeal Case No. 33 of 1873 and on paragraph 6 of the Bengal Government's letter No. 1166 of the 21st May 1874*, Mr. McPherson, Assistant Settlement Officer in charge of Puri, writes as follows:—

But the transfer of *thani* rights had become a matter of every day occurrence even before resettlement operations began. Babu Nandakishore Das (paragraph 104 of his

* Collector to Commissioner, No. 2316G., dated 12th November 1892.

report) notes that transfer was particularly common in the Khas Mahals probably on account of the proximity of the Government estate of Khurda, in which the right of transfer was admitted by Government order No. 2553 of 17th December, 1874. Babu Akahoy Kumar Sen, Assistant Settlement Officer, found that it was similarly common in Paragana Lembai, which also adjoins Khurda Subdivision. In Kotdes, Mr. Nathan found in 1890-92 that "the sale of *thani* lands was a matter of daily practice, and that as a rule without any reference to *Muqaddams* or zamindars." There was, however, always a tacit admission that the landlord's consent was legally necessary to such a transfer, and this was expressed in the shape of a fee, usually amounting to two annas per rupee of purchase-money, paid when the new purchaser applied to have his name entered in the zamindar's rent roll."

In Cuttack, *thani* rights appear to be commonly sold without the previous sanction of the proprietor, and the latter appears in most parts to invariably recognise the new tenant on payment of the customary mutation fees. As the subject is of importance I here quote the opinions recorded by some of the most experienced Settlement Officers in that District:—

Name of officer.	Pargana where working.	Opinion.
Babu Jotendra Mohan Sinha.	Deogaon, &c. ...	The landlord's consent is not necessary at the time of sale, but when the mutation is recorded in his <i>sherista</i> a mutation fee is charged.
Babu Nabin Ch. Kar ...	Matkatnagar, &c.	<i>Thani</i> rights are transferred, and the zamindar usually consents.
Maulavi Mahamed Chainuddin.	Kuhunda Jaipur, &c.	<i>Thani</i> holdings can be sold with the zamindar's permission.
Babu Beni Madhab Chatterji.	Benahar ...	Rights of occupancy of <i>thani</i> raiyats are not transferable without the zamindar's consent, but they are freely sold and purchased by actual cultivators.
Babu Jogendra Narayan Mitra.	Assureswar	Rights of <i>thani</i> raiyats are transferable with or without the consent of the landlord.
Babu Sriram Ch. Bose	Utikan, &c.	<i>Thani</i> holdings are not transferable without the zamindar's consent.
,, H. C. Rai ...	Balubisi	<i>Thani</i> cannot transfer without the zamindar's consent; purchasers of <i>thani</i> are recorded as <i>pahi</i> .
Mr. Taylor	... Bakhrabad	<i>Thani</i> lands are sold without the zamindar's consent but the zamindar refuses to record mutation without the usual fees though he will take the rent from anyone who brings it.
Babu J. M. Das	Jajpur	In practice <i>thani</i> raiyats often sell their lands without the zamindar's consent. The transferee, however, subsequently purchases the zamindar's consent either by cash payment or otherwise. The zamindars are well aware of their right and always refuse to recognise such transfers unless they are paid.

My experience is that *thani* is freely sold and that it is only in a few Parganas that the purchasers are recorded as *pahi*. Indeed, there are many cases in which *thani* holdings have been sold by civil courts in execution of decrees and the new tenant has been perforce recognised by the zamindar. In all cases of voluntary sale the zamindar before recognising the transfer requires that all arrears of rent should be paid up in full, and further demands from the vendee a *rusum* that may amount to one-fourth of the price. In some cases, as in Kodinda he also takes from the vendor a *salami* of a couple of rupees. In other parts the zamindars generally are contented with the payment of the arrears and a couple of rupees as *dakhi kharij salami* from either party.

In conclusion, we may say that *thani* is now-a-days transferred, but that the zamindar does not record the transferee in his *sherista* as *thani* raiyat without a fee.

322. Whether any length of prescriptive possession could ever turn a *pahi* into a *thani* raiyat history does not tell us; my own impression is that by entries in settlement records from time to time the number of *thani*

raiylats was increased and that the village community and the *padhan* in the earliest times and in later times the *mugaddam* or zamindar decided the matter. On this point Mr. Stirling had to confess ignorance, and it is fairly certain that since his day no few acquisition of the *thani* right otherwise than by the acquisition of a *thani* raiyat's lands has been recognised. On the other hand many causes, notably the great famine of 1865-66, have combined to destroy pre-existing *thani* rights in large areas.

The assessment of *thani* lands at the last settlement was high,* averaging in Cuttack Rs. 2-13-0, in Puri Rs. 2-1-3, and in Balasore Rs. 1-10-10 per acre. Rents are estimated to have absorbed from one-half to one-third of the produce of an average harvest, and as cultivation extended and the people multiplied the privilege of taking up other lands at low rates was necessarily curtailed. Even before the zamindars had executed their *kabuliyats* for the thirty years' settlement many raiylats† had surrendered their *thani* rights rather than bind themselves in perpetuity to payment of the high rates fixed, and in the famine years of 1866-67 very large numbers were forced to throw themselves on the mercy of the zamindar. Some abandoned their lands and fled, and came back later on to be re-admitted as *pahi* raiylats; others gave up their *thani pattas* in return for advances; others, no doubt—though of this there is less record—were ejected altogether from their lands on failure to pay their rents. The wonder is not that the area held by the *thani* raiylats should have decreased, but that so much should survive to the present day. Taking the three districts we find the change to have been as follows‡:—

DISTRICT.	At last Settlement.	Pure <i>thani</i> now recorded.	Area of <i>Thani pahi</i> .	The sum of column 3 and half of column 4.	Percentage of column 5 on column 2.
	Acres.	Acres.	Acres.		
Cuttack	133,700	41,700	84,200	83,800	62
Puri	96,900	35,200	63,000	66,700	66
Balasore	107,100	45,900	—	45,900	43
Total	337,700	122,800	147,200	196,400	...

The survival of an area of *thani* comparatively so small in the Balasore District is due to the enormous extension of cultivation, on account of which the separate area and rent of *thani* tends to disappear, also to the strength of the zamindars and to the severity of the famine of 1866 in that district.

323. Besides his ancestral *thani* lands and the lands temporarily cultivated and paid for at the ordinary *pahi* rates or in kind,

Thani-pahi.

the *thani* raiyat commonly held a large area of land in his own village called *thani-pahi*, for which he paid at an intermediate rate.§

I have not found any mention in the papers of the last settlement of the Cuttack and Puri districts of such a status as '*thani-pahi*,' but it is probably identical with the *karpahi* lands of resident raiylats.

The rights of the holder of *thani-pahi* and *karpahi* lands appear to have differed only from those of a *thani* raiyat in that the latter was entitled to his house rent-free, while the former was not, but paid a very high rent for any homestead held in addition to the *thani minha*; in fact, we find in Balasore that *thani pattas* were given to persons who already held *chandina*. I cannot ascertain whether the same right to fixity of rent was recognised as in the case of *thani* lands, but it appears certain that there was a right of occupancy. After the Settlement 1836 *thani* raiylats continued to take up *pahi* land at lower rates and in many instances the two classes of land became inextricably confused, thus giving rise to the mixed *thani-pahi* tenancy as recorded in the papers of this settlement. Unfortunately the term *thani-pahi* has been loosely used to designate holdings composed of perfectly separate and distinct *thani* and *pahi* lands for which rents are separately paid, as well as holdings in which the lands are so mixed that the raiyat cannot separate them, and the

* See also Appendix A (13).

† As in Olas Pergana and parts of Sailo.

‡ See Appendices AA, BA, CA. One-half of the area in column 4 is probably pure *thani*.

§ Mr. Ricketts' reply to the Board's twenty-one questions of 1831, paragraph 51.

landlord has taken a lump rent for both and enhanced or reduced it as if the whole holding were *pahi*. In either case separate rents have been fixed for *thani* and *pahi* and the incidents of the *thani* tenure declared to belong to the *thani* portion; but when the lands are indistinguishable the whole is practically the holding of an ordinary settled raiyat of the village, as defined in the next and succeeding paragraphs.

324. *Pahi* raiyats originally meant non-residents cultivating lands in villages other than the villages in which they lived, but in course of time the term *pahi* came to be used

Pahi Raiyats.

of all lands that were neither *thani* nor privileged, i.e., *bazyastî*, nor held by the headmen or servants of the village community as *jâgir*. These lands when taken up and tilled by a *thani* raiyat were generally called *karpahi* or *thani-pahi*, and the holder acquired in them a right of occupancy; when tenanted by a resident of another village they were called *upper-pahi*, and the tenant had practically no rights beyond those secured him by the *pattah* or lease that he received. Mr. Stirling says that summary claims for recovery of arrears from *pahi* raiyats were commonly grounded on *kabuliyats* or counterpart leases, and that it was the custom to give leases for *pahi* lands. Mr. Ricketts, however, ten years later, i.e., in 1831, writes of the Balasore District that interchange of *pattas* and *kabuliyats* was very rare with any class of raiyats, but that in practice *pahi* raiyats frequently held for years at an unvarying rent, and that self interest prevented undue exactions on the part of the landlord, though no length of possession was considered to confer any right of occupancy, and when the land was wanted by a *thani* raiyat the *pahi* tenant had to give it up. When the thirty years' Settlement began, all the local officers, and more especially Mr. Wilkinson, were strongly in favour of granting to all raiyats leases defining their rents and rights.* In the earliest settlements this was done, and *pattas* giving to *pahi* raiyats fixity of rent for the term of settlement were actually distributed in Parganas Lembai, Serai, and Chaubiskud of the Puri District; in Bakhrabad, Kodinda and other Parganas of Cuttack, and in a few villages of Balasore. However, this procedure did not meet with the approval of the higher authorities; and in paragraph 8 of letter No. 1199 of the 22nd August, 1837 from the Secretary to the Government of Bengal to the Officiating Additional Secretary to the Sadar Board of Revenue it was laid down—

"That *pattahs* should never be given by the assessing officer to *pahi* cultivators; such a proceeding necessarily creates a false and mischievous impression of a right of occupancy and it is clearly at variance with the tenor of paragraph 2 of the letter of the Secretary to the Sadar Board of Revenue at Allahabad dated the 8th of March, and appended to the Board's circular of the 12th November, 1833."

Apparently on receipt of these orders the granting of *pattas* was discontinued, and the settlement left the great mass of the *pahi* cultivators exactly as it found them, a simple record of the names of the cultivators found in possession being made in the field book and the whole of the *pahi* land recorded as in charge of the zamindar.† The rent was generally considered to be four annas in the rupee less than the rent of *thani* raiyats.

325. Act X of 1859 marks the introduction of the next epoch in the history of raiyats' rights. It divided them into two classes—

Development of rights of *pahi* raiyats.

those who had held their lands continuously for twelve years, and those who had not. The latter it left as it found them—mere tenants-at-will; the former it secured in possession of their holdings as long as they continued to pay their rent.

The rent was fixed subject only to enhancement on the specific grounds laid down in Section 17 of the Act, viz.—

That the rate of rent was below the prevailing rate paid by the same class of raiyats for lands of a similar description, and with similar advantages and places adjacent;

That the value of the produce of the productive powers of the land have been increased otherwise than by the agency or at the expense of the raiyat;

* See answers to Board's twenty-one questions of 1831, printed as an appendix to Mr. Toynbee's History of Orissa.

† *£'ans zamindar.*

That the quantity of land held by the raiyat has been proved by measurement to be greater than the quantity for which rent has previously been paid.

On the other hand the raiyat could under section 18 claim reduction of the rent in the event of diminution of the productive power of the land otherwise than by his fault, or for the loss of land by diluvion.

The incidents of the tenure of a *pahi* raiyat having occupancy rights under Act X of 1859 were—

- (1) Right to occupy the holding until evicted under a decree of a competent court.
- (2) Right to demand a *patta* at a fair and equitable rent.
- (3) Right to fixity of rent subject to alterations made under Sections 17 or 18 of the Act.
- (4) Liability to distraint of growing crops for arrears of rent.
- (5) Liability to ejectment, or to sale of movable or real property, under a decree for rent.
- (6) Right to surrender the holding by a notice given to the landlord or his agent in the month of *Chaitra* in the year preceding that in which the relinquishment was to take effect.
- (7) The tenure was not transferable.
- (8) The tenure was not voidable on a sale of the parent estate for arrears of revenue or otherwise.
- (9) The tenure was heritable according to the Hindu law, but the landlord was not bound to recognise a division of the rents.

Tenants without occupancy rights were practically untouched by the Act, and remained liable as before to enhancement of rent (after due notice) and to eviction for non-payment subject to the terms of any written lease or other contract.

Though the law thus protected a large body of the raiyats they continued for many years in almost total ignorance of their rights, or if they knew them were not strong enough to enforce them.

Even down to the time of the present settlement this continued to be the case in the Balasore District, and in the north-eastern part of the Cuttack District. The zamindars were powerful, cultivation was extending fast, there was a rush for new lands and a few raiyats could prove uninterrupted possession for twelve years of their holdings. This state of change contributed to the insecurity of the raiyat's tenure, and the large number of petty proprietors in the estates along the Baitarni is attributed to the purchase by raiyats of the proprietary right over their own holdings in order to protect themselves from eviction. In the more settled parts of the Cuttack and Puri Districts the raiyat had, however, some security of possession.

I have found raiyats holding *pattas*, sometimes at quite inadequate rents, who had for a generation successfully resisted all attempts of the zamindar to evict them or enhance the rent. In Shergarha and other Parganas on the west many *pahi* tenants hold rent free homesteads and have been practically admitted to the position of *thani* raiyats and *thani-pahi* tenants are always recognised as having a right of occupancy in both *thani* and *pahi* land.

The poorer and non-resident raiyat is however a mere tenant-at-will. If he falls into arrears he is summarily evicted, and any man willing to pay up the balance of the rent is installed in his place. This is not so common now that nine years of settlement operations have taught the people the nature of their rights, but to this day the smaller proprietors have not become reconciled to the limitation of their customary right of eviction.

The more intelligent zamindars deliberately try to prevent the growth of occupancy rights. I have known cases in which fields were exchanged every few years, thus destroying the continuity of the possession; but the most ingenious system that I have met with was that practised in Haldia Khandaiti (Khurda) where the lands are not leased but mortgaged subject to the payment of an annual share of the produce, the mortgage being paid off and another executed whenever a new tenant offers better terms.

Extent of *pahi* holdings.326. The following statement compares the area in acres, past and present, of *pahi* holdings* :—

DISTRICT.	Last Settlement.	Present Settlement occupancy raiyats.	Add non-occupancy raiyats.	Add one-half of <i>Thani Pahi</i> .	Totals of columns 3, 4, and 5.	Percentage of increase of column 6 on column 2.
	Acres.	Acres.	Acres.	Acres.	Acres.	
Cuttack	268,900	419,200	8,100	42,100	469,400	74
Puri	82,900	128,600	1,600	31,500	161,700	95
Balasore	219,100	434,500	13,400	<i>Nil</i>	447,900	104
Total	570,900	982,300	23,100	73,600	1,079,000	99

327. Tenants other than the '*khushbash*' or respectable *thani* and resident*Chundina*.

raiayats have always paid rent for their homestead lands. In the case of the cultivating classes such lands were generally part of the *pahi* holding, but the shopkeepers, artisans, and labouring classes, who, having no arable land in the village, pay rent for homestead lands only, are called *chandinadars* and their tenure *chundina*. *Pahi* raiyats also, who having their home in one village hold also house or homestead in other, are sometimes known as *chandmadars* of the latter village. The term originally implied inferiority, as on this class fell the obligation of supplying forced labour or postage when required by any Government official; but this obligation having fallen into disuse, the unpopularity of the term has passed away and the word *chandina* has come to be used for all homestead land paying rent separately from the arable lands. At the last settlement *chandinadars* were given leases securing to them fixity of rent for the term of settlement, and the incidents of the tenure do not materially differ from those of *thani* raiyats except that they are governed by the Contract Act and not by Act X of 1859.

Chandina tenancies have to a great extent merged in *pahi*, and on the other hand new *chandina* tenancies have been recognised, especially in *palnas* or villages consisting solely of homestead and in the suburbs of towns.

328. I have already discussed the right of the *thani* raiyat to sell his holding without the permission of his landlord.

Transfers of raiyati holdings.

In the case of *pahi* holdings I do not think that sales were ever allowed until very recent years, but in the *khas mahals* of Puri and the Parganas adjoining Khurda sales are now common, and since the *hhanapuri* began, such transfers have been often made in various parts of the Province, and are generally recognised by the zamindar on payment of a sufficient *salami*. An attempt was made at the time of attestation to obtain statistics of the number of transfers since the passing of the Tenancy Act, but the figures are very incomplete. In Cuttack† out of 1,090 villages only 1,264 cases of purchase of occupancy right were recorded, and of these, 37 only were by *mahajans* who were not cultivators. This gave rather less than 1 per cent. of the occupancy raiyats as having purchased their right within the last ten years; a figure that is certainly below the mark.

In Balasore 151‡ transfers (142 *thani* and 9 *pahi*) were recorded, the average area sold being over 2½ acres and the average price over Rs. 16-12 per acre. More figures were at the same time obtained from the Sub-Registrar showing in five years 2,464 transfers. In 1,082 cases the purchasers were unspecified; of the remainder 92 were *mahajans* and 95 landlords of the vendor.

* See Appendix AA., BA., CA., etc.

† Vide letter No. 1331 of 12th July 1896 from the Settlement Officer, Orissa, to the Director of the Department of Land Records and Agriculture.

‡ Letter No. 724S. of 7th March, 1896 from the Settlement Officer, Balasore, to Director of the Department of Land Records and Agriculture.

I would now supplement these figures with the statistics obtained from the registry offices of the three districts for the last ten years. These may be summarised as follows:—

DISTRICT.	Class of holding.	Average annual number of transactions.	STATS OF PURCHASERS.					Rent.	Area sold in acres.	Price paid.
			Money-lenders, &c.	Land-lords of the holding.	Other land-lords.	Raiyats.	Others including unspectified.			
								Rs.		
Cuttack ...	Thani	596	40	44	97	103	312	1,655	774.87	26,891
	Others	581	41	30	75	123	312	3,269	606.94*	31,671*
Balasore	Thani	210	19		73	73	45		388.09	11,374
	Others	1,008	100		354	446	108		876.69	37,368
Puri ...	Thani	1,439	104		63	247	1,025		...	1,40,786
	Others	5,664	646	5	677	3,423	913		5,326.61	3,81,287

* "Others" in this statement comprise *pahi* holdings as well as *chandua* and houses, and probably *lamil bazyafi* and *tanki*.

It is curious that the number of transfers, especially of *pahi* holdings, is much smaller in Cuttack than in either of the other districts. In Puri the much larger number is due to the freedom of transfer in the *khas mahals*, and especially in Khurda; and partly also to the fact that figures for the last three years only have been supplied. It is likely that a good deal of *tanki* is included in the Puri figures. If these statistics be taken as fairly complete, we find that the proportion of the *thani* lands that annually changes hands by sale varies from rather less than 1 per cent. in Cuttack or Balasore to at least 2 per cent. in Puri. "Others," supposing it to include everything except *thani* and *nisfi lakhiraj bazyafi*, represents in Puri an annual transfer of over 2 per cent. of the assessed area; in Cuttack less than one in a thousand; and in Balasore less than two per thousand.

Of course these figures are exclusive of a good many transfers made without registration of the deeds, but even making considerable allowances on this account, it is very difficult to account for the greater number of transfers in Balasore than Cuttack and the vastly greater number in Puri.

In all three districts there has been an enormous increase in the number of transfers since the commencement of the settlement operations; and since their close sales and mortgages of holdings and portions of holdings have become so common as to arouse the apprehensions of zamindars and district officers.

I think that the attention of sub-registrars should be drawn to the rules published at pages 325 to 328, Part I of the *Calcutta Gazette*, dated March 23rd, 1898; and that although sections 12 and 18 of the Bengal Tenancy Act have not been extended to Orissa, the same care should be exercised in refusing to admit to registration deeds purporting to transfer fractions of holdings without the landlord's consent. The idea appears to be fast springing up that the landlords have no power to prevent the sale or division of holdings, and I understand that sales of portions of even *pahi* holdings are freely registered throughout the Province. It should be impressed on sub-registrars and all revenue officers that the settlement has in no way altered the previous rights of raiyats, and that the Bengal Tenancy Act contains even more strict provisions against subdivision of tenancies than did Act X of 1859.

In 1890 in Cuttack the number of recorded transactions was 305 in the case of *thani*, and 58 in the case of other raiyati holdings; in 1898 the numbers had risen to 743 and 1,782.

In Balasore the number of sales of *pahi* lands in 1897-98 was about 3,000, or three times the average of the decennial period.

In Puri over 8,000 *pahi* holdings and nearly 1,400 *thani* holdings changed hands in 1897-98, and figures obtained from the Puri and Pipli sub-registries

* Figures for last four years only.

† Figures for three years only.

show the number of transactions to have trebled in the last three years. The areas transferred are not small, the average being between three and four *bighas*,* say 1 to 1½ acres, so that comparatively few sales of individual plots have been registered. I may add that it has been brought to my notice that zamindars (especially in Balasore) are inducing raiyats to execute registered mortgages of holdings in their (the zamindars') favour and that sub-registrars are registering such mortgages without objection.

329. Figures were compiled in the fair rent camps to show the price for which *thani* and *pahi* lands sell in different localities.

In Cuttack the prices of *thani* land range from Rs. 17 in Kate, a Pargana much subject to inundation, to Rs. 83 in the irrigated tract of Matkatnagar, and give a general average of about Rs. 40 per acre. For *pahi* the figures are almost too small to generalise from, but give a general average of Rs. 25 to Rs. 30 per acre.

In Balasore the price is said to be from Rs. 40 to Rs. 50 per acre for *thani*, and from Rs. 20 to Rs. 25 for *pahi*.

These figures differ somewhat from those obtained from the registration returns abstracted in the preceding paragraph, which give the following prices per acre :—

District.					Thani.	Others.
Cuttack	...	...	...	...	35	51
Balasore	...	...	...	...	29	42
Puri	...	...	...	...	...	71

In the statements obtained from the Puri sub-registry office the prices in different years vary only from Rs. 11 to Rs. 14 per *bigha* and at Pipli from Rs. 15 to Rs. 18, so that Rs. 71 per acre, the figure obtained from the Puri Sadar returns converting at 3 *bighas* to the acre, is too high.

Figures showing the rent reserved are only available for Cuttack and the sub-registry office at Puri. From them we find that, in Cuttack, the average rent reserved on *thani* lands is Rs. 2-2 per acre, on "other" holdings Rs. 5-5, and the price in either instance averages sixteen times and ten times the rent reserved. The figures obtained from the Puri sub-registry office show the average rent reserved on raiyati holdings to be about 9 annas a *bigha*, or from Re. 1-8 to Rs. 2 per acre, and the price is about twenty-three times the rent reserved.

330. So far I have considered the position and rights of tenants prior to the present settlement proceedings, and it remains

The Bengal Tenancy Act.† to show the changes caused by the extension to Orissa of certain sections of the Tenancy Act and by the settlement of rents.

The following portions of the Bengal Tenancy Act have, since the beginning of the Settlement, been extended in this Province :—

Chapter.	Section.	Orders extending.
I.	3	
II.	4-5	
	7	Government Notification, dated 10th September, 1891.
V.	19-20	
	27-38	Government Notification No. 2448 L.R., dated 27th June, 1892.
	39-40	See below.
VI.	41-47	
VII.	48-49	Government Notification, dated 10th September, 1891.
	52	See below.
VIII.	53-75	Government Notification, dated 10th September, 1891.
IX.	80	Government Notification No. 2448 L.R., dated 27th June, 1892.
X.	101-15	Government Notification, dated 10th September, 1891.
XVII.	189-90	Government Notification No. 115 L.R., dated 5th January, 1893.
	191-92	Government Notification, dated 10th September, 1891.
		For 192 see below.
	39	Government Notification No. 99 L.R., dated 7th June, 1896.
	7, 40, 52 and 192	Government Notification No. 971 T.—R., dated 17th October, 1896.

* Figures are expressed in *bighas* equal to a third of a *man*. It would be much simpler in future to record them in acres.

† See also Chapter XIII.

Sections 3 to 5 contain only definitions of terms in the Act.

Sections 19 to 21 introduce a new law as to the acquisition of occupancy rights in supersession of section 6 of Act X of 1850. The important differences are these—

- (a) That in order to acquire occupancy rights it is not, under the new law, necessary that the same land should have been held for twelve years; it is sufficient if any land in the village has been so held. This is perhaps the most important, from the raiyats' point of view, of all the changes in the law.
- (b) That a settled raiyat, i.e., an occupancy raiyat acquiring his right by possession for twelve years or by inheritance, acquires at once occupancy rights in any fresh land taken by him in the village.
- (c) That there is a legal presumption that every raiyat is an occupancy raiyat.

Section 22 defines the law of merger, previously little recognised in Orissa. It has been given effect to in this settlement in the case of zamindars and village headmen who have tried to acquire occupancy rights in their own lands by purchases from tenants, *benami* or otherwise. In the case of *thani* lands it has not always been held to apply, e.g., in cases where at the last settlement the zamindar had *thani* lands and *banasahi* lands recorded in his own name.

Sections 24 and 26 do not make any difference in the existing law.

Section 25 limits the right of a landlord to eject an occupancy raiyat, and does away with the right of ejectment for arrears of rent given by section 21 of Act X of 1859.

Sections 27 to 38 of the Tenancy Act deal with the enhancement and reduction of rents of occupancy raiyats, and greatly amplify the provisions of sections 13, 14, 17, and 18 of Act X of 1859. The principal changes effected are—

- (a) Limitation of enhancement by agreement to a maximum of two annas per rupee made under a contract in writing and registered.
- (b) The fixing for fifteen years of the rent of an occupancy raiyat where it is enhanced under any of these sections.
- (c) The abolition of the necessity for the notice of enhancement required by section 13 of Act X of 1859.
- (d) Limitation of enhancement on the ground of increase of the productive power of the land to the cases given in clauses (c) and (d) of section 30.

This prevents enhancement on the ground of improvement by irrigation or protective works of Government.

Section 39 does not affect tenant right, but provides for evidence of rise in prices.

Section 40 provides for commutation of produce rents. It was extended to Orissa in 1896, but has been little used. Landlords generally objected to commutation, and the rent calculated on the average value of the payments was so high as to deter applicants.

Sections 41 to 47 define the rights of raiyats who have not got occupancy rights. Under the old law these raiyats had no rights except such as they obtained under a contract, and were only tenants-at-will holding from year to year. The present law limits the right of ousting the tenant to ejectment on the expiry of a written and registered lease, or for failure to pay an arrear of rent or for refusal to execute an agreement to pay an enhanced rent at a fair and equitable rate. Such ejectment can only be made in execution of the decree of a competent Court, and after every enhancement the raiyat is entitled to hold for five years at the rent agreed upon. These provisions are quite opposed to the previous custom of the Province.

Sections 48 and 49 of the Tenancy Act limit the rent recoverable from an under-raiyat to 25 per cent. (50 per cent. under a registered lease) in excess of that paid by the landlord-raiyat, and provide for his ejectment (in execution of a decree of a Court) on the same terms as in the old law. The first provision

has no counterpart in Act X, and is quite opposed to the existing state of things in Orissa.

Section 52 [as amended by Act III (B.C.) of 1898] provides for the enhancement of the rent of a raiyat found to be holding land in excess of that for which he is paying rent (Section 17 of Act X of 1859, modified).

Sections 53 to 55 deal with the time for, and apportionment of, payments of rent. The provision for apportionment is not found in Act X of 1859, but is taken from the Indian Contract Act, which probably applied. In any case it is not likely to be made use of.

Sections 56 to 60 relate to the granting of receipts for rent, and are of very great importance. Section 10 of Act X only laid down that the receipt should specify the year or years on account of which the payment was made, and this is about all that the ordinary "*pauti*" contains. Under the Tenancy Act, however, it is provided that the receipt shall be given in a prescribed form and a counterfoil kept, and that every receipt not containing the particulars required shall be presumed, until the contrary is shown, to be an acquittance in full; and failure to comply with the provisions of the law renders the landlord liable both to a suit for damages by the tenant, and to fine at the hands of the Magistrate. The provision as to fine is new. The enforcing of these provisions would go far towards securing tenants in the possession of the privileges attaching to their recorded status; but I fear that at present they are almost a dead-letter. To enable these sections to be given effect to, it is, in the first instance, necessary to prescribe a simple form of receipt, as that authorised for Orissa is far too complex.

It should also be provided that any Revenue or Civil Court should have the power to take cognisance of any offence under section 58 (3) and either punish it itself or commit to a Magistrate. There appears to be much doubt at present as to the proper manner of instituting proceedings in such cases. The Collector of Cuttack has recently brought this point specially to my notice.

Sections 61 to 64 provide for the payment of rent in certain cases through a civil court. These sections make a considerable change in the law (section 4 of Act VI of 1862), and entitle the tenant to deposit the money in court (i) when the landlord refuses to receive and grant a receipt, or (ii) when he has reason to believe that the landlord will so refuse, or (iii) when he cannot obtain a valid acquittance, or (iv) when he does not know to whom the rent is payable. Formerly it was only in the first of these alternatives that rent could be deposited.

Sections 65 and 66 supersede sections 21 and 105 of Act X of 1859 as regards the execution of decrees for arrears of rent. On the one hand they take away the right to sue for ejectment (section 78 of Act X) in the case of occupancy raiyats, raiyats at fixed rates, and permanent tenure-holders; on the other they simplify the sale of the tenure, if transferable, and take away the restriction on sale provided by section 108 of Act X in the case of decrees in favour of a sharer.

Section 67 of the Tenancy Act supersedes section 20 of Act X and prevents any written agreement from taking away the landlord's right to interest at 12 per cent. on arrears of rent.

Section 68 of the Tenancy Act gives courts a discretionary power to award damages (sections 2 and 3, Act VI of 1862) in suits for arrears of rent.

Sections 69 to 71 introduce a new provision for the appraisalment and division of produce rents.

Section 72 and 73 deal with the effect of transfers of the landlords' or tenants' interest on the rent charge. They do not appear to alter the existing law.

Sections 74 and 75 re-enact the provisions of the Regulations and of section 10 of Act X of 1859, but in the case of petty exactions provide a much heavier penalty than that in the old law.

Section 80 provides for the registration of landlords' improvements. It is a corollary to section 133, but not likely to be much used.

Sections 101 to 115 as amended by Act III (B.C.) of 1898 provide the machinery for the preparation of a record of rights and settlement of rents.

The important provisions from the point of tenant-right are—

- (a) that settlements of rents and decisions of disputes under section 106 prior to the 1st November 1898 and decisions under sections 105 and 106 after that date are final;
- (b) that rents settled under section 104 of the amending Act are to be presumed to be fair and equitable;
- (c) that the rents of occupancy raiyats are fixed (subject to section 113) for fifteen years and those of non-occupancy raiyats and under-raiyats for five years.

Sections 189 and 190 only provide for making and publishing rules under the Act.

Sections 191 and 192 make provision for enhancing rents in the face of invalid grants or leases by landlords.

331. It will be seen that the sections extended have improved the position of tenants chiefly—

Summary of important alterations effected by the Bengal Tenancy Act.

- (1) by extending the right of occupancy to many who could not have claimed it under Act X of 1859;
- (2) by limiting the right of ejectment for arrears of rent;
- (3) by limiting the right of landlords to oust or enhance the rents of non-occupancy raiyats;
- (4) By giving some fixed rent to under-raiyats;
- (5) By providing for the granting of proper receipts;
- (6) By providing for the payment of rent into court where this was not formerly possible;
- (7) By giving a right to obtain commutation of produce rents.

The introduction of the Bengal Tenancy Act has been made piece-meal, and important gaps have been left, e.g., section 183 is necessary to save local customs not inconsistent with the Act; section 178, to prevent raiyats from contracting themselves out of occupancy rights under section 7 of Act X of 1859; sections 155 and 156, to complete the provisions as to ejectment.

Even more important than the mere extension to the Province of a few sections of the Tenancy Act has been the preparation of a record-of-rights and the settlement of rents under Chapter X.

By the first process we have ascertained and assured to each tenant the status to which, under the Tenancy Act, he is entitled. To all settled tenants, occupancy, non-occupancy and under-raiyats, even to tenants holding proprietor's private lands, has been given a statement of the lands they hold and the rent they pay or are to pay. In the case of the large majority of raiyats this rent is fixed for fifteen years, for non-occupancy and under-raiyats in temporarily-settled estates for five years. To *thani* raiyats, *bazyastidars*, *chandindars* and *kharidadars* an entry in the *khatian* has secured fixity of rent for the term of settlement.

332. There are no terms in use in Orissa more ambiguous in their meaning than *khandait* and *paik*. The name *khandait* was used by some of the *Garhjat* chieftains, and in their case is said to be derived from *khandā*, meaning a local division or a hill fort. It is, however, more generally derived from *khandā*, meaning a sword, and it is probably in this sense that it is applied to the border zamindars and to the *killajai* rajas of the sea coast. It is also the name of one of the principal agricultural castes, and was used of the watchmen in charge of the zamindars' *outcherries**. In this paragraph, however, it is only as the heads of the *paiks* that we have to consider them. The word *paik*† also is applied both to the remnants of the old feudal militia serving under *khandait* chiefs and to the footmen and messengers of the zamindars in the *moghulbandi* and to the village watchmen.

The most reasonable theory on which we may account for this diversity of meaning is that the feudal organisation was at one time far more widely spread, and that all over the country there were swordsmen and footmen holding the land on semi-military tenure, cultivating it in time of peace, but bound

* Mr. Ewer's report, paragraph 242.

† Sanskrit *padalika*=footman=S. *panish*, *peon*; Hindi, *padā*.

to rally to their leader's standard when called upon to do so; and this theory is more than probable, as we know that in the sixteenth century Abul Fazl estimated the number of *paiks* at 100,000, and that the rural militia was strong enough to beat back the Muhammadans more than once. Later on the bulk of them must have settled down as peaceful cultivators forming the present *Khandait*, *Pan* and *Kandra* castes*, while the old organisation survived under the *khandait* zamindars and rajas of the borders.

Under the Moghul and Mahratta rule these latter continued to be responsible for the internal administration of their estates, but throughout the *moghul-bandī* the *paiks* were placed under the control of *sardars* and *khandaits* and attached to Thanas.† Every zamindar and *talukdar* was primarily responsible for the peace of his estates, but the Mahrattas, to a great extent, disregarded the *talukdars*, and the *amil* managed the rural police through his assistant, the *kolwal*. Regulation XIII of 1805 provided that a register of the *jagir* lands of the *khandaits*, *sardar paiks* and inferior *paiks* should be opened, that their lands should be protected in perpetuity from resumption, and that where the zamindars had not been specifically deprived of their control of the rural police, they should be appointed as *darogas*, or given powers of police officers in subordination to the *daroga*, and that if the zamindars had been deprived of the control of the police, *sardar paiks* and *khandaits* should be vested with the immediate maintenance of the peace and the duty of apprehending offenders. It appears, however, that the whole regulation‡ was based on a misapprehension of the nature of the Mahratta police, or that it was misinterpreted by the local officers, and that up to the time of the Khurda rebellion little or nothing had been done towards giving effect to its provisions. Consequently the zamindars dispossessed many of the *paiks* of their lands, and those who remained tended to become mere zamindari servants. I may instance Ambohatta, in which during the first thirty-five years of British rule the area of the *paik jagirs* was reduced from 4,000 to 2,000 acres§. This Pargana, it is to be remembered, was under Keonjhar till the beginning of the century.

At the last settlement those *khandaits*, *sardar paiks* and *paiks* who had not been dispossessed of their lands were confirmed in possession, and an attempt was made to use them as a body of military police under the direct control of the Commissioner. This attempt was abandoned, and when the present settlement began they were for the most part engaged in ordinary police duties—attending at the Thanas, patrolling roads and assisting in the arrest of criminals; but they were found to be too independent to be of much value, and with their consent their *jagirs* have now been assessed and the occupants have been relieved of all police duties and allowed the status of *thani raiyats* with the further concession that the present incumbents will pay only half rents for the term of their lives||.

One large *jagir*, that of the Chandbali *khandait*, has been made into a separate estate with a revenue of Rs. 341 under the name of *Thukura Paikali Jagir Bazyafti*. So, too, the lands of the *khandait* of Chandpur, in the Puri District have been settled with him as a separate estate, *Arasi Jagir Bazyafti Jagubandhupur*, with a revenue of Rs. 125. The villages of Rendha and Sipasurbali have been settled with the *khandait* of Rendha at a half rent of Rs. 374 during his lifetime and included in *taluk* Krishnachandra. This *khandait* used to patrol the sandy wastes on the foreshore and held a large portion of the cultivated land in Rendha as his *jagir* and was in possession of the remainder as farmer. The total area now recorded in his name is 10,379 acres, of which only 901 are cultivated. The other important *jagirs* are those of Jadumani Paikra, *sardar khandait* of Cuttack, in whose name 353 acres in Pargana Deogaon and 29 acres in the Puri District have been recorded. He appears to have obtained most of this land by usurpation, but was confirmed in possession of it at the last Settlement and made over a quarter of the *jagir* to ten *naib khandaits* who attended the Thana and did all the police work. Another large *khandaiti jagir* is that of Arakhpur, held by two *sardars* and eight assistants who patrolled the Grand

* Vide paragraph 220.

† Vide Mr. Fiddian's report on the Balasore tenures, paragraph 48.

‡ Mr. Ewer's report, paragraph 225.

§ Mr. Kingstord's report on Balasore, paragraph 153.

|| Government order No. 836J. of 9th February 1897.

Trunk Road near Barchanna. They are recorded as being in possession of 205 acres, which are assessed at As. 12-6 per cultivated acre under a special agreement. Altogether the figures for *khandaits* and *paiks* may be summed up as follows:—

DISTRICT.	NUMBER—		AREA OF Jagir, IN ACRES.		INCIDENCE, &c.	
	At last Settlement.	At present Settlement.	Last Settle- ment.	Present Settlement.	Half rent assessed.	Incidence per acre.
					Rs.	Rs.
Cuttack	... 496	520	1,580	2,000	2,330	1.3
Puri	... 146	121	800	310	360	1.2
Balasore	... 815	792	4,400	4,600	2,400	0.8
Total	... 1,457*	1,433	6,780	6,910	5,090	0.13

The above figures exclude the Chandbali *jagir* and that of the *khandait* of Rendha, but include lands held by those *rahhars*† and *nahabars* who, being of the *Khandait* caste, have been treated in the same way.

333. The *Chaukidar* or village watchman is the direct descendant of the *chatia*‡ and *danduas*§ of the Hindu village communities. Their duties were to guard the rice fields of the villagers, to help in collecting rents, to measure lands in case of disputes, and to report to the zamindar or village headman all crimes and unusual occurrences. They were never even under the Mahrattas so directly subordinated to the *amil* as were the *khandaits*, but continued to fill a triple position as servants of the State, the zamindar and the village, and were remunerated by small grants of land and by certain payments from the villagers. In the *Mughulbandi* they took the name of *chaukidar* or *chaukia*, but in Khurda and other parts of the *Rajwarah* many retain to this day their old designation.

At the conquest we found a varied assortment of *chaukias*, *danduas*, *chatias*, *nahabars*, *paiks* and *khandaits*, performing the duties of village watchmen, and while Regulation XIII of 1805 brought the last two classes under the immediate control of the *darogas* of Thanas, it left the rest as the servants of the zamindars. Regulation XX of 1817 secured the village watchmen in possession of their *jagir* and subjected them to the control of the *darogas*; their appointment was, however, still left to the zamindar. The last settlement still further strengthened the Government control over these rural police. Where an excessive number were found in any village, their *jagir* lands were resumed and they became ordinary raiyats or zamindar's servants; to the rest were assigned an average of 3 acres each as *jagir*. These lands are registered in the police books; the *chaukidar* for the time being has an interest in them that terminates in his death or removal from office, and the tenure is neither heritable nor partible. The zamindar had no power to oust the *chaukidar* from his *jagir* land, or to cut down any trees standing on it, or to take their fruit; but where the *jagir* was small or there was no *jagir* (as in the case of a new village) the zamindar was often induced to allow to the *chaukidar* a small plot of land, rent-free or at a low rent. For watching the crops of the villagers, the *chaukidar* also collected from every cultivator a small contribution, consisting of one or two *gaunis* (five to ten soors) of paddy, or a couple of sheaves of corn (*halabira*) for every man of arable land.

In the present settlement all the *jagirs* in the temporarily-settled area have been resumed, and the *chaukidars* for the time being recorded as *thani* raiyats in respect of such lands.

They will, as soon as Act VI (B.C.) of 1870 is put into force in any part of Orissa|| be relieved of their police duties unless re-appointed under that Act. They will at the same time become liable for the payment of the rents settled, and acquire in their lands all the rights of *thani* raiyats.

* Figures taken from the reports on Orissa Tenures.

† Road patrols.

‡ Derivations of *Chatia* are various. It is generally taken to mean a 'whipper' from the Uriya *chatibare*, but more probably it is from 'chat', a roadside village or halting stage.

§ Staff bearer.

|| Its extension to Cuttack, Puri and Balasore from the 1st June 1899 was sanctioned in notification No. 514T.—D., dated 26th May 1899.

The number and area of the resumed *jagirs* is as follows:

DISTRICT.	Number of <i>chaukidars</i> .*	Number of parcels of <i>jagir</i> .	Area. Acres.	Rent settled. Rs.
Cuttack	... 5,118	7,300†	10,200	25,400
Puri	... 1,451	2,300	2,800	5,200
Balasore	... 2,060	2,500	7,200	12,400
Total	8,629	12,100	20,200	43,000

334. Next to the village watchman, the accountant or *bhoi* was the most important of the village officials. He it was who had to keep all accounts of the payments of individual raiyats under the system of direct dealing with the cultivators which prevailed in Hindu times. Under the *talukdari* system established by the Mahomedans his services became less valuable, and in many villages he was dispossessed of his lands. The first British rulers believed in the policy of not interfering in the internal affairs of the people, and made but little use of the *patwaris*' services until the failure of their attempts at Settlement showed the necessity for more accurate information.

Regulation XII of 1817 was then passed for the better control of *patwaris*, but the provisions of this regulation were not enforced in Orissa. At the last settlement it was only in the large estates that the *patwari* was allowed to retain his *jagir*, and even in these he was rather a zamindar's than a Government servant. In a good many estates the *patwaris* were remunerated not by *jagirs*, but by allowances in cash, included, with or without separate mention, in the allowances of the zamindars.

They continued to file annual statements of demand of collection until the passing of Act X of 1859, when the practice was, in accordance with the orders of the Board of Revenue, discontinued. Between 1876 and 1879 further attempts were made to utilise the *patwaris*, but the attempt failed, and though since then they have, at least in the Puri and Balasore districts, continued to file papers as required by the Board's rules, no use has been made of the returns, and the *patwari* had, at the beginning of the present settlement, degenerated into a sort of general assistant to the *chakla kanungo*.||

In the present settlement the *jagirs* of *patwaris* have been resumed and assessed at full rates. They have been treated as *thani* raiyats, and have ceased to be liable to render any service to the State, village, or zamindar.¶

The number of *patwaris* and the area and rent of the resumed *jagirs* in the three districts are as follows:—

DISTRICT.	Number of <i>patwaris</i> .	Area of re- sumed <i>jagir</i> . Acres.	Rent of resumed <i>jagirs</i> . Rs.
Cuttack	100	2,100	5,000
Balasore	50	1,400	1,000
Puri	89**	450	760
Total	245	3,950	6,760

335. (1) The *Bhandari* or *Napit* is the village barber; a very important personage indeed. On all ceremonial occasions the Hindu requires to be shaved, and the barber acts also as a go-between at the time of negotiations for marriage. He is found in almost every village, and is frequently the *shebait* of the local *thakurani*, and

* Includes all *chaukidars* holding *jagir* lands; see letter No. 309J., dated 30th April 1896, from the Commissioner to the Government of Bengal.

† This includes all *jagirs* attached to estates borne on the revenue-roll of Cuttack, though the land be in Puri or Balasore.

‡ See paragraph 406.

§ No. 74 of 13th July 1859.

|| Bengal Government to Board, No. 3760-11261L.E., dated 30th December 1879; and Rules at section 13 of Revenue Officers' Manual of 1858.

¶ Government order No. 2604 of 10th May 1894 and No. 3743L.E., dated 9th December 1897.

** The number of *patwaris* in Puri is 202 (an earlier statement shows 231), but only some of them held *jagirs*.

holds a bit of land rent free on that account.

(2) The *Dhoba* is the washerman, also a Hindu, and a person of considerable importance. Found in most villages.

(3) *Barhai* is the carpenter.

(4) *Kamar* is a blacksmith. He and the carpenter, make and mend the plough, carts and agricultural instruments.

(5) *Kumbhar* is the village potter.

(6) The *Nayak* or *Jyotish* is an astrologer, who prepares horoscopes, indicates lucky or unlucky days, and prophesies good or bad harvests as the occasion demands.

(7) *Abadhans* or teachers are of two classes, *palpara* or school-masters, and *nayak* or astrologer.

(8) *Ghat Manjhi* or *Nauris* are the ferrymen.

(9) *Mehtars* or *Haris* are sweepers.

(10) The *Purohit* or priest is of two kinds, the *Despurohit* or priest appointed the zamindar, and the *Kulpurohit* or hereditary chaplain of a respectable family. He performs purificatory rights after deaths and officiates at marriages.

The first five classes, as also the ferrymen are commonly found in possession of *jagir* lands, the others more rarely.

They are all, though nominally the servants of the community, in the habit of receiving small fixed payments from the villagers, besides fees on special occasions. The following are the payments recorded :—

(1) The *Chaukidar*.—One or two measures (*gauni*) of paddy, or one to seven sheaves of unthreshed corn (*kachra dhan*) per *min*.

(2) *Washerman* and *barber* from 2 to 4 *gaunis* of paddy every year, or two to four annas in cash, from each married couple among their clients; besides, an extra payment at each wedding.

(3) The *Blacksmith* and *carpenter* get from 2 to 4 *gaunis* (say 10 *seers*) of paddy per plough made or repaired, or a corresponding amount in *kachra dhan*.

(4) The *Potter* sells his wares to the villagers at a *pag* of five pots for a *gauni* of grain.

(5) The *Ferryman* generally takes payment from the people he crosses or compounds for a lump payment from the village.

(6) The *Astrologer*, *Schoolmaster* and *Priest* are paid by presents and subscriptions, according to the position of their clients.

336. Besides the above, a certain number of miscellaneous *jyirs* are held by the following classes :—

Miscellaneous *jagirs*.

(1) *Bethia Bauri*; labourers bound to render service when called upon.

(2) *Bhat* or village bards.

(3) *Nagarla bajadar* (drum beaters), *Turiya bhara-giya* (trumpeters), *Mahuri*, a *sararchi* (flute players). These are musicians to whom grants of land were assigned by zamindars.

(4) *Mangatjan* or dancing girls, who, in large estates, received land for their maintenance.

(5) *Dihidar* and *Simanadar* or keepers of the marches.

(6) *Gauris* or village cowherds.

(7) *Ba'shnabs* or religious mendicants.

(8) *Adhikari*—head priest of temples.

(9) *Madhia Brahman*—ceremonial assistant.

(10) *Malis* or gardeners, often in charge of village shrines.

(11) *Barua*, a village headman; found only in north Balasore.

(12) *Rathbahak*, car-pullers of Jagganath.

(13) *Sasamal*, or head bearer of the Raja of Puri.

These *jagirs* are few in number and small in extent, and some found only in permanently-settled areas. Most of them were resumed at the last settlement and are to be found among the *jagir bazayfti* tenures.

337. Other *jagirs* resumed, except in Khurda and the permanently-settled areas are—

Resumed *jagirs*.

(1) *Zamindar's Nankar*.

(2) *Mugadlem's* and *Padhan's*, *Pitrlek* or *Watan*.

(3) *Jagirs* of *sarbarahkars* or rent-collectors; of *baithkarans*, *amins*, *kotkarans*, *dalkarans* and *bhoimuls*, old Hindu revenue officers answering to the *kanungo*.

(4) *Dalais* and *tandkars*, who are servants of the above and similar to *paiks*.

(5) *Dograis*, or belonging to the old feudal retainers yielding military service.

338. In the following statement the areas in acres confirmed as *jagirs* are compared with those at the last settlement, as shown in the reports on Orissa Land Tenures:—

DISTRICT.	ACRES AT LAST SETTLEMENT.						ACRES AT PRESENT SETTLEMENT.					
	Barber.	Washer-man.	Black-smith.	Carpenter.	Others.	Total.	Barber.	Washer-man.	Black-smith.	Carpenter.	Others.	Total.
1	2	3	4	5	6	7	8	9	10	11	12	13
Cuttack	2,600	2,800	1,300	1,800	400	8,900	1,260	1,230	590	800	330	4,210
Balasore	640	660	360	380	240	2,280	520	500	240	290	190	1,740
Puri ...	1,600	1,670	690	730	110	4,800	960	900	340	330	70	2,600
Total ...	4,840	5,130	2,350	2,910	750	15,980	2,740	2,630	1,170	1,420	590	8,550

The difference is due chiefly to the dispossession by the zamindars of the *jagirdars* whose services are no longer so essential to the village community or who have in any way made themselves unpopular, and partly to the resumption at this settlement of the lands of village servants proved not to perform their duties.

Under the head 'Others' the principal areas are held by *ghât-marjhis* or ferrymen (some 200 acres), potters (about 100 acres), sweepers and astrologers.

The confirmed *jagirs* are tenable only so long as the service for which they are granted is performed. They are by custom heritable but cannot be partitioned or transferred, though cases have been brought to light where this has been done.

339. Under-tenants include all classes of persons occupying land included within the tenure or holding of a tenant, other than a proprietary tenure-holder or farmer. They may be divided into (1) Tenants holding under *basyaftidars* and other privileged tenuro-holders; (2) Tenants of raiyats, *thani* or *pahi* and of *jagirdars*; (3) Under-tenants of under-tenants and of raiyats of *lakhirajidars*. There can be little doubt but that by the custom of the country all three classes were considered to be mere tenants-at-will, the only exception being that in certain areas—I may instance Pargana Balubisi in Cuttack—*thani* and other resident raiyats of the village cultivating the lands of *basyaftidars* and Brahmans on a cash rent were considered to have a right of occupancy. A few cases are also found where the under-tenants have their houses on the holding portions of which they cultivate. It is, however, common to find the same man holding as under-tenant for many years together, though the particular fields sublet to him may vary.

The effect of the present settlement proceedings has been to substitute new division. It was held that Brahmans who do not hold the plough themselves and quasi-proprietors such as *kharidâ jumâbandidars* were tenure-holders and not raiyats, and all the latter class and nearly all *basyaftidars* who sublet their lands have been given the status of tenure-holders. They themselves indeed claimed to be proprietors or dependant *talukdars*, and resented being considered raiyats, but the result of the compromise by which they were tenure-holders is that many of their tenants acquire occupancy rights and record them.

Basyaftidars and *tankidars* who are raiyats of *thani* *lakhirajidars* or tenure-holders, are now to that status under Chapter VII. Hence thus made in their position.

being that the amount of rent recoverable by legal means is limited by Section 48 of the Act. The under-tenants are therefore divided into four classes; (1) Raiyats of tenure-holders with rights of occupancy; (2) Raiyats of tenure-holders with non-occupancy rights, (3) Under-raiyats with rights of occupancy—very rare, being found only in a few Parganas; (4) Under-raiyats liable to eviction for failure to pay rent, or at the end of the year after service of due notice.

It is to be observed that the rents of this last class within revenue-paying estates have been fixed in most cases for five years, but the tenants are nevertheless liable to eviction before the close of that period.

Under-tenants of *jagirdars* are strictly speaking raiyats, but do not acquire rights of occupancy.

340. Figures have been tabulated for the districts of Cuttack and Balasore which show that there within the revenue-paying estates, including under-tenants of under-tenants and of raiyats of *nij-jot*, 2,18,097* under-tenants holding 1,35,879 acres.

Details of the figures are as follows:—

District.	Raiyats holding under tenure-holders.		Number of under-raiyats of <i>bazyafidars</i> who are raiyats.		Number of under-raiyats of rights and <i>jagirdars</i> .		Number of under-raiyats of under-tenants and of raiyats of <i>nij-jot</i> .	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.
Cuttack	74,017	39,196	21,910	10,047	24,117	13,238	No figures.	
Balasore	71,130	57,510	125	110	26,798	15,788	2,600	1,755
Total	1,45,147	96,706	22,035	10,157	50,915	29,026	2,600	1,755

It is to be feared that the numbers in columns 2, 3, 4 and 5 are not to be trusted. The dividing line between the hired labourer and the under-raiyat is difficult to follow and many low-class cultivators have not caused their names to be recorded. Taking the figures as they stand, the percentage of under-raiyats on the number of raiyati holdings (excluding *bazyafiti*) is 6.9, and the area held by them is in Cuttack 2½ and in Balasore about 3 per cent. of the total area. In other words 7 per cent. of raiyats other than *bazyafidars* sublet portions of their holdings amounting in the aggregate to 2½ per cent. In Puri no separate figures are available, but the total number of tenants, raiyats and under-raiyats not paying direct to the proprietors is 55,684. Nearly all such under-raiyats have other lands of their own, *pahi* or *thani*, either in the same or in some neighbouring village. Respectable cultivators take up and cultivate lands held by Brahmans, or small patches required for sugarcane and tobacco which the raiyat himself cannot or is unwilling to grow; but the tenants paying produce rents are oftener men of low caste whose position differs but very little from that of the hired servants.

The area held by tenure-holders in Balasore is 93,030 acres. In Cuttack tenure-holders have not been separated from *bazyafidars* who are raiyats, but the area may be estimated at 59,000 acres, assuming half the *bazyafiti* lands to be treated as tenure-holdings. At this computation tenure-holders sublet 62 per cent. of their lands in Balasore, and in Cuttack 44 per cent. Like the under-raiyats, these men also may be divided into respectable raiyats cultivating for their own convenience and low-class men paying produce rents; but the former largely predominate.

341. In Balasore figures as to the rent paid have been compiled for about a lakh of under-tenants, whereas in Cuttack statistics are only available for 450† villages.

* Appendices K.A, K.B. The figures for Balasore require some explanation. In order to exhibit tenancies paying produce rents a holding had sometimes to be shown twice over with the result that the number of tenancies for which detailed figures are given appears to be 1,03,460 but is in fact estimated to be only 80,880 deducting the number shown twice over.

† Fifty in each Thana. It may be explained that the compilation of these figures being a tedious process could not be completed for the Province.

The result may be summarised as follows:—

DISTRICT AND CLASS.	PAYING RENT IN KIND.					
	Paying rent in cash.		Under the <i>Dhulibhag</i> —system.*		Under the <i>Sanya</i> system.*	
	No.	Area.	No.	Area.	No.	Area.
<i>Cuttack.</i>						
Raiyats of tenure-holders	7,815	4,760	2,220	1,295	5	11
Under-raiyats ...	5,036	2,504	2,363	1,463	3	3
Total ...	12,851	7,264	4,583	2,758	8	
<i>Balasore.</i>						
Raiyats of tenure-holders	68,120	51,460	5,660	4,140	250	294
Under-raiyats of raiyats of the <i>mahal</i> ...	16,410	9,630	4,980	3,525	20	200
Under-raiyats of under-tenants ...	2,305	1,825	590	420	5	5
Total	86,835	62,415	11,230	8,085	275	315

These figures do not include the area held rent free or on service tenures, amounting to 1,980 acres in Balasore, and in Cuttack to 322 acres; or about 3 per cent. in either district. They show *dhulibhag* rents to be paid by less than half the under-tenants, and, as was to be expected, more by under-raiyats than by raiyats of tenure-holders. Of the produce rents, I shall treat elsewhere*; here the incidence of the cash rents is to be considered.

In Balasore the rents of tenure-holders' raiyats average Re. 1-11-8 per acre, those of under-raiyats, Re. 1-15-8 per acre, and those of under-raiyats in the second degree, only Re. 1-10-8 per acre. The first point to be noticed is that the rents of the tenure-holders themselves average a little less than Re. 1 per acre, so that the average profit may be taken at 12 annas per acre. Before the recent enhancement of *bazyafiti* and *kharida jamabandi* rents, those classes of tenure-holders must respectively have made a profit of about Re. 1-4 and Re. 1 per acre of land sublet.

Thani rents average Re. 1-12-11 and *pahi* rents Re. 1-14-8 per acre, so that the margin of profit would appear to be only one to four annas per acre, or from 4 to 12 per cent.

In Cuttack the incidence of rents works out to Rs. 2-11-4 per acre for tenure-holders' raiyats, and to Rs. 3-1-7 in the case of under-raiyats. The incidence of the tenure-holders' rents may be taken at the mean of the average *kharida-jamabandi* and *bazyafiti* rents or Re. 1-4 per acre, and that of *thani* and other settled raiyats' rents is Rs. 2-14 per acre. Tenure-holders, therefore, still draw a profit of about Re. 1-7 per acre, or nearly as much again as the rents they pay, while raiyats make about four annas or 10 per cent.

Mr. Kingsford thinks that the real incidence of the rents must be higher, or raiyats would not sublet as they do. He seeks to account for the comparatively low rate by pointing out that in many cases a portion of the holding only pays a money rent, the remainder being held for service or on a produce rent. In fact, the low cash rent is offered as an inducement to the under-tenant to take up the land. Another explanation is that in many cases the sub-letting is a family arrangement for the assignment of particular lands for the support of individual members, and that the area retained is not for the sake of profit so much as an assertion of right, and to prevent false claims to the tenancy.

My own opinion is that, with the exception of lands held by Brahmans, holdings are generally too small to require under-tenants. It has been my experience in *khanapuri* and attestation either that lands held by widows and minors are cultivated by under-raiyats, or that in a very large number of cases under-raiyats are poor relations. In such cases as these rents are nominal. The general apathy of tenants in regard to the enhancement of the rents of their under-tenants might also support this view, except that apathy towards enhancement is also characteristic of zamindars in Orissa.

* See Chapter XXII. Paragraph 533, where the terms *dhulibhag* and *sanya* are explained.

342. The zamindar is primarily the owner of every timber tree on his estate. The lands given by him or by any superior authority in revenue-free or *tanki* grants, or sold to

Rights in trees.

form a *kharida* tenure, were absolutely alienated from his estate, and we therefore find *ikhirajdars*, *bazyafidars*, *tankidars* and *kharidadars* sole owners of all trees on their lands. Not so with the ordinary raiyat. Even though the tree has been planted by him on his own holding, he is but a part owner, and in many estates has only a usufructuary property in it.

Custom varies the respective rights of landlord and tenant from District to District, from Pargana to Pargana, and even from village to village. In every Village Note the rights of tenants in trees formed one of the subjects for enquiry, and when reporting on the assessment of the Pargana, most Assistant Settlement Officers have put on record their conclusions as to the customary rights of the raiyats.

In Cuttack the general result of the enquiries made is—

Cuttack.

(1) That all raiyats can cut bamboos, canes and non-timber trees standing on their holdings.

(2) That both *thani* and *pahi* raiyats take the fruit of all trees on their lands.

(3) That in the case of a tree on *thani* land neither zamindar nor raiyat can cut down the tree without the other's consent, and that when it dies or is cut down each is entitled to half the wood.

(4) That a *pahi* tenant has no right whatever in the wood of a tree on his land, unless planted by himself, in which case he is generally considered a half owner.

The principal variations found are—

(a) That in some villages where the tenants are strong and the landlord weak, an absentee, or indifferent, trees are cut down by *thani* raiyats, and the whole wood appropriated without the zamindar's consent; such a custom is only found in a few villages, and is nowhere admitted by the zamindar as the tenant's right.

(b) That in many estates it is customary to take a rent or half the produce before allowing a *pahi* raiyat the fruits of trees on his land. Such a practice is mentioned in the reports on Hatinunda, Deogaon, Kodind and Kuhunda Jaipur; but it is more common for the zamindar to take only a small present of fruit as the price of his formal consent to the tenant taking the remainder. Where a rent is taken for the fruit-trees planted by the raiyat himself, they are generally excepted, but this is not always the case, for in village Berhampore, in Pargana Bakhrabad, Mr. Taylor found the zamindar taking rent for all trees alike.

(c) In some villages it is customary, when a tree falls even on a *pahi* holding, to allow the raiyat a quarter or half the wood; but this appears to be rare and rather a matter of grace than of right, unless the tree was planted by the raiyat.

Puri.

In the Puri District Mr. H. McPherson has recorded the following note of the main differences

that he found:—

(1) In many *hastabud* villages of Kotdes it is said that *thani* raiyats have full rights to plant, enjoy and cut trees in their own lands.

(2) In many *muqaddami* villages of Kotdes it was admitted (by *thani* raiyats) that they could not cut any tree without the permission of the *muqaddams*.

(3) In a great number of villages the *muqaddams* and raiyats did not agree as to the extent of the latter's right.

(4) In most villages it was found that the *pahi* raiyats had no right to cut any tree without permission, but in some cases their right to bamboos grown on their homestead lands was admitted.

(5) In Lembai two Assistant Settlement Officers, Babu Akhoy Kumar Sen and Babu Shyama Charan Sen, gave it as their finding that *thani* raiyats enjoy the produce of, and may cut down trees grown on their own lands without permission, but that *pahi* raiyats can only enjoy the produce and may not cut trees growing on their own lands without permission, except bamboos and trees of small value.

(6) In other Parganas there is diversity of record. I quote some cases.

Mauza Belpur, Pargana Kotrahang.—*Thani* and *pahi* raiyats may enjoy the produce, but the trees belong to the zamindars:—

Mauza.	Pargana.	} Raiyats (<i>thani</i> and <i>pahi</i> are not distinguished) enjoy the produce, but cannot cut, except bamboos or trees they have planted themselves.
Inohole.	Oldhar.	
Astrong.	Astrong.	
Madhipur.	Damarkhand.	
Kantapara.	Tappa Kamaan.	

Various villages of Pargana Banohas.—*Lakhrai* and *thani* raiyats cut and enjoy without permission.

"Ichhapur, Pargana Paschimduari.—*Thani* raiyats may cut and enjoy without permission, *pahi* raiyats, may not. All may plant without permission.

"In some *hastabud* villages of Kotdes the raiyats claimed rights over trees standing on the waste lands of the village.

"In *mausa* Jaipur of Pargana Rahang the raiyats claimed in a section 106 case before Babu Sudarsan Das, Assistant Settlement Officer, to have exercised the right of taking the fruits and cutting the timber of trees standing on waste lands of the village. Their claim was rejected. An appeal was lodged before the special judge, but I have not heard with what result."

In the village note of *mausa* Pratapasasan Mr. Nathan has quoted the opinion of Nitai Mahanti, one of the chief *muqaddams* of Kotdes. He said that it was the general custom of the Pargana that no tree was cut without permission of the zamindar or *muqaddam*; that in *hastabud* villages this rule was always observed up to the death of Bhagban Ryat Singh, the former zamindar; that since the quarrel of his two sons who succeeded as zamindars and the general mismanagement of the estate by inefficient servants, the rule had fallen into disuse. In *muqaddami* villages, he said, it depended on the relations of the *muqaddams* and raiyats; if they were on good terms, the *muqaddams* did not insist on their permission being obtained.

Another cause for the diversity of custom I find to be the following: Where the zamindar or tenure-holder is strong, he has usually been able to maintain the old custom which necessitated the obtaining of his permission to cut trees. He has also been able to insist on getting the whole or a share of the produce of trees standing on the *pahi* lands. But where the landlord has been weak or an absentee and the raiyats wealthy or powerful, through combination the tables have been turned. *Thani* raiyats have exercised full rights to plant, enjoy and cut trees. *Pahi* raiyats have enjoyed the produce and been able, without permission, to cut all but the big fruit trees.

In the Bulasore district *thani* and *pahi* raiyats enjoy the fruits of trees on their lands without payment, but they may cut down no trees without the permission of the zamindar. On *thani* lands half the value of a tree cut down belongs to the zamindar; on *pahi* lands the zamindar takes the full value, unless the tree has been planted by the raiyat when he takes half. A *thani* raiyat may cut bamboo for domestic and other uses from the clumps in his homestead without payment. He may also cut wood from the trees in his homestead for agricultural purposes only, e.g., for making ploughs, but not for fuel. In many parts similar privileges are enjoyed by *pahi* raiyats. For the purposes of a funeral a raiyat may cut wood (branches, not trunks) without permission, but the zamindar generally levies a fine and thus recoups himself.

CHAPTER XII.

RENT DEMAND AND COLLECTION.

343. The earliest account that I have seen of the system under which the rent to be demanded from each tenant is ascertained is in Mr. Ricketts' reply to the Board's twenty-one questions in 1831, from which I here quote:—

Zamindari system of assessment.

"Paragraph 55.—The system according to which the sum to be paid by each raiyat is adjusted is as follows: In the month of *Jeyt* or *Assar*, that is to say, six months after the crops have been reaped, the *bheean* and *jama-usulbaki* are prepared. The zamindar in person, where there is no intermediate tenant, or his *gomastah* or *patwarree*—in *muqaddami* villages the *muqaddam* and in *surberakari* the *surberakar*—taking with him the papers of the past year, summons the raiyats; each is questioned as to the quantity of land he cultivated in the past season; if the answer be that he tilled the same as in former years, and there is no reason for supposing he tilled more, that quantity is entered. If it be supposed that a raiyat

tilled more than he acknowledges, the *degwar* and other raiyats are appealed to; if they confirm the larger quantity, that is entered in the *theeran*. If a raiyat acknowledges having tilled particular fields, but denies their containing the quantity of land estimated, or if he denies altogether having cultivated, the extent is ascertained by measurement. The rates demanded for *thani* and *thani-pahi* land are regulated by the *bheans* of former years. This is the prevailing rule, but all are not guided by it, for all are not honest and considerate, nor are all wise enough to see by what conduct their interests will be best consulted. The rent demanded for *Pahi* land and land newly broken up is regulated by the rate generally paid for such land, the extent of the *bigha*, and the crop it is capable of producing. The total demandable being thus determined the raiyat is questioned as the amount discharged, and his receipts for the same examined; and on any balance appearing it must be paid or an *ikhtranamah* written by an early date."

"Paragraph 56.—If a raiyat,—be he *thani*, *pahi*, or tenant-at-will,—persists in refusing to pay the sum demanded, either on the plea that he did not cultivate or that the rates demanded are too high, a summary suit for the arrear is instituted under Regulation VII of 1799, and of all my duties, the most unsatisfactory and harassing is the trial of these suits."

No difference was made by the last settlement, except that the demand for *thani*, *chandina*, and certain other tenants was fixed. Act X of 1859 made the rents of occupancy raiyats a fixed amount variable only by agreement, or by enhancement or reduction on certain specific grounds.

The actual system by which in practice the demand is ascertained varies very much in different localities and estates. In theory, the basis of the assessment is in every case a field-to-field measurement or *bhauria maran* made with the local *padika*. The results of this are entered in a *bhauria*, or measurement paper, showing the length and breadth of each field, its computed area, the nature of soil or crop, and the tenant's name. From the *bhauria* is prepared the *bhian* or rent-roll, showing against each tenant the area of each class of land held by him, the rate of assessment, and the total rent, as well as the cesses and other extra payments due from him.

An abstract of the *bhian* showing only the total demand against each tenant and called of an *ekpadia*, is also commonly prepared. The rates are determined as a rule by compromise, and are based on those entered in the last settlement papers, and it is very common to allow a small remission (*char*) by a deduction from the calculated rent or by entering a smaller area than has really been found. In most estates the *bhian*, when once prepared, is re-written only after considerable intervals, though a measurement (*partial bhauria*) to ascertain the extension of cultivation is made every one to ten years, more often after five or six. Rates are only altered when all other means of obtaining an enhancement are exhausted, and even then it is rather by a re-classification of the soil than by increasing the nominal rates that the addition is made. In a few estates enhancements have been made at so much in the rupee all round, e.g., I recall to mind the estate of the Mandals, near Tanghi. This is done when the zamindar does not wish for a re-measurement of all the lands.

These remarks apply generally to the larger estates; many petty zamindars and village headmen are for ever re-measuring, altering rates and rents, and in some estates, notably in those of the Chaudhris of Bhinjarpur, it is the exception to find a rent-roll that represents the present demand. They are all either obsolete or not admitted by the tenants, and the rent is just as much as the landlords or their farmers and agents can screw out of the raiyat.

In the case of riverside alluvial or *pal* lands of which the fertility varies from year to year, and sometimes also in the case of rice lands in flooded tracts, the rent is fixed by annual measurement and assessment at certain rates. The same custom is also found in parts where the *rabi* crop, *harar*, *mandia kuthi*, etc., is inferior and can only be grown under favourable conditions. It is especially common with *dahua* rice, which is only cultivated when the winter crop fails.

In the riverside lands of the Utikan Pargana this practice was recognised though for the last few years the zamindar, being on *lad* term with his raiyats, had simply continued to collect the most recent admitted demand; and in some villages of Deogaon it was found that the assessment was simple in the extreme—Rs. 3-2 per acre for all paddy, and Rs. 12-8 per acre for all tobacco-growing lands. In such villages there is no great fixity of holdings, and the zamindars generally claim that the tenures are *utbat*. As a rule, however, the same tenant cultivates more or less the same lands year after year, but the sand and silt obliterate the field divisions, and at the time when ploughing com-

mences the *gumashta* measures up the lands in the possession of each tenant, and if one bit is more fertile than another will frequently insist upon an exchange so as to get the maximum area cultivated with valuable crops.

A second measurement is made at harvest time, when the rates for the year are fixed according to the crop grown.

In the case of *pal* lands the assessment so made is often treated as an extra and not entered in the rent roll, or put into a separate one; but in the large flooded areas where tobacco and *rabi* crops form the chief support of the people the rent for these are entered in the *bhān*.

344. Having ascertained his demand, the next province of the landlord is to collect it, and first to deal with the time at which collections are made*. At the last Settlement the *kists* in which rents were payable were in a few instances fixed by entries in the *pattas* and *kabuliyats*, but they vary from Pargana to Pargana and no orders or correspondence on the subject have been found. Probably they were *kists* established by use, and as such they vary from one to nine in number.

In 1850† it was laid down that the rent *kists* should be entered in the raiyats' *pattas* and that the *kists* should be regulated by the means and character of the raiyats and the season of the chief harvest. The orders however came too late to be given effect to in Orissa, and the *kists* continued to be regulated by custom alone.

The subsequent rent laws, section 20, Act X of 1859 and section 53, Act VIII of 1885, extended to Orissa in 1891, made no difference, as they left the instalments to be determined by agreement or established usage, i.e., the usage of the Pargana or other local area. An attempt has been made to ascertain what that usage is, and the *kists* nominally existing have been recorded in the village notes prepared during the present settlement. In the old *kabuliyats* the instalments most commonly entered are—

	<i>Pans.</i>			
<i>Ashin</i> (October)	4	(one quarter).
<i>Agrahan</i> (December)	4	
<i>Magh</i> (February)	4	
<i>Chaitra</i> (April)	4	

But the natural tendency has been for the rent *kists* to adapt themselves to the payments of revenue which, in the large majority of estates, are made in two equal instalments in April and November, and we find that in most villages the dates recognised are the 1st *Baisakh* or 15th April and the 1st *Kartik* or 15th November, half the rent being due on either occasion. The other recognised *kists* are—

	<i>Pans.</i>	<i>Pans.</i>
<i>Ashin</i> (October)	4 or <i>Baisakh</i>	... 4
<i>Kartik</i> (November)	4 or <i>Kartik</i>	... 8
<i>Magh</i> (February)	4 or <i>Magh</i>	... 4
<i>Baisakh</i> (May)	4	

In 1893, and again in 1897, enquiries were made to ascertain how far these *kists* were observed in practice, and there is a consensus of experience that while the *kist* days determine the date of suits for recovery of arrears, the practice is to take rent whenever it can be got, and then about a fortnight before the latest date for the payment of revenue to turn every available man, even temporary hands, on to the collection of the share of the rent necessary to meet the revenue. It is also agreed that the payment of half the rent in November entails great hardship on the raiyat. The staple crop of the district is the winter rice, of which the early (*laghu*) variety is reaped in November-December, and the late (*guru*) in December-January. Before either of these is reaped, threshed, and in the market, a month or two must elapse, so that the raiyat cannot realise on them before February or March. He is thus thrown back on the spring (*biāli*) rice and the *bhadai* crop of cotton or *mandia*, which together form in most Parganas a very insignificant part of his harvest, and are besides required to feed him for the three months, from September to December. The result is that the raiyat is forced to borrow, and does so as a rule on the

* See also paragraph 565 and Appendix, P. A. as to Revenue *kists*.

† Board's Circular No. 838, dated 19th November, 1850.

karkia system, the conditions being that the raiyat will repay the money in February with interest in kind at the rate of two *gaunis* (six to ten seers Cuttack weight) of paddy per rupee of the loan.

On the other hand there is an apparent absurdity in the proposal to afford relief to a tenant by anticipating four annas of the rent by six months, and it has been said that in the case of the larger raiyats, the effect of so doing will be to force him to sell at the cheap season the grain that he would otherwise have held up for better prices in September-October.

It is indeed difficult to fix instalments which shall be equally suitable to all classes of tenants and to all parts of the district, but it is generally admitted that not more than a quarter of the rent should be paid out of the *biali* and *bhadoi* crops, and that the remaining three-fourths should be paid between February and May out of the winter rice and the *rabi* harvest.

The dates recommended by the most experienced officers consulted have been—

	Annas.			
MR. NATHAN—				
1st November	4
1st January	4
15th February	4
1st June (from the <i>dalua</i> rice crop)	4
MR. MAUDE—				
End of December	4
End of February	8
Middle of April	4
BABU JAMINI MOHAN DAS—				
15th November	4
15th March	12

MR. STEVENSON, when Collector of Cuttack recommended,* four *kists* viz.—

	Annas.			
In <i>Agrahan</i> = 1st December	4
In <i>Pus</i> = 1st January	4
In <i>Magh</i> = 1st February	4
In <i>Chaitra</i> = 1st April	4

In this office letter No. 2349 of 3rd November, 1897, I expressed my opinion that the most desirable instalments would be—

	Annas.			
Due on 15th November or 1st December	4
Do. 1st January	4
Do. 1st March	4
Do. 15th April	4

The first *kist* would be met from the sales of *biali* rice and the *bhadoi* crop; the second from early sales of winter rice; the third from the winter rice, and the fourth from the late *rabi* or the *dalua* crop. The division would be of great benefit to the raiyat, but its introduction is almost certainly impracticable unless the proportions in which revenue is payable are likewise altered and three-fourths demanded in April. It must also be borne in mind that in villages in the possession of sub-proprietors the rents should be in the hands of the latter at least one month before the latest day of payment of revenue. Assuming, then, the present revenue *kists* to be maintained, the revenue being

* Letter No. 2022 of 9th February, 1893 to the Commissioner.

payable half before the 28th April and the balance before the 8th November, I would suggest as the *kist* days—

				Annas.
<i>Magh</i> = 15th February	...	...	...	8
<i>Baisakh</i> = 15th May	...	...	...	4
<i>Ashin</i> = 15th October	...	...	...	4

345. When a zamindar begins collecting his usual procedure is to summon the raiyats to his nearest *cutcherry* (or office) where he or one of his servants sits. Each tenant's payment is noted in the daily cash book (*siaka*) and on payment of a small fee [*kharara spani* of one or two pice per rupee, a receipt (*pauti* or *kharara*)] is given. This receipt is generally on palm-leaf and merely sets forth the amount received and the account on which it was paid. In a few estates of Cuttack the practice of giving receipts on paper and keeping counterfoils has of late years been introduced, but it is unusual to find full details as to the holding and the rent entered.

At the end of the year the payments of each tenant entered in the daily cash book are carried into the ledger (*rokar* or *jamakharch*); and from this is prepared a statement (*jamawasilbaki*) of demand, collection, and arrears, for each tenant. This in big estates is made up every year, but very often in smaller or ill-managed estates the tenant's account runs on for several years without any attempt to strike a balance. Then the tenant is called up, and after some haggling, and probably a very small concession to the tenant by way of remission of the miscellaneous collections (*kharcha*), the parties come to an agreement (*rafu*), and on payment of a few pice and the balance of his rent the tenant can obtain an acquittance in full (*bisodlan*).

If a tenant is refractory and will not pay, the zamindar has various means of compelling him. In the first instance he sends a peon to the tenant's house and the latter has to feed the peon and pay a small fee (*piyada-miyadi*) of one to six pice per visit. If he still declines to pay, the landlord can distrain the standing crop, and may require the aid of the Collectorate *kanungo* in so doing; and a powerful zamindar may deprive a raiyat of the services of the village barber and washerman. Finally, the landlord can bring a summary suit under Section 32 of Act X of 1859, and having got a decree may take out execution against the person or movable property of the judgment debtor, or if the tenure be transferable may apply for its sale: and he might, under the old law, either separately or at the same time as he brings a suit for the arrears due, apply for the ejectment of the tenant.

In the case of a raiyat without rights of occupancy, the landlord may for arrears due summarily eject the tenant under Section 21 of the Act, and where the zamindar is strong and the raiyats weak, this provision is practically applied to all tenants who are not protected by *patas* or *kabuliyats*.

346. It has always been admitted that the zamindars in Orissa do not collect in full the rents nominally payable, and the enquiries made in this Settlement have been complicated by the difficulty of ascertaining what the real rent is.

In 1895 I expressed my opinion that the rents recorded in our *khatians* were, to a great extent, fair rents ascertained by Assistant Settlement Officers on the best evidence they could get.

Since then the settlement of fair rents has added greatly to our knowledge of the payments actually made by raiyats, and it has been made clear that in the greater part of the Province the rents recorded in the *khatians*, and forming the basis of the settlement, are actually those recognised by zamindar and raiyat. The cases in which they are not such are either where, as in Balasore, large recent enhancements have led to bad feeling between the raiyats and their landlord, so that they cannot come to terms and rents have had to be ascertained by striking the mean of the parties' statements, or where landlord and tenant have combined to show lower rents than are actually collected. Sometimes it has been possible to determine the true rent by an examination of receipts, but this is very difficult, and more often the rent recorded is a fair rent. Striking instances of the first class of cases were to be found in some

villages of Saibir, where for years practically no rents had been paid, as the tenants refused to admit the landlord's demand to be correct; here soil maps were prepared, the tenants agreed to certain rates, and rents were attested accordingly. Some of these disputes have brought to light an unexpected stubbornness on the part of the raiyats. I have found a village (Jobra) near to Cuttack where most of the tenants held palm-leaf *pattas*, dating generally from just after the great famine, and assigning lands at very low rents. Despite all efforts of the zamindars, the tenants had successfully resisted enhancement, and attempts to get more rent had only resulted in the withholding even of that admitted to be due, and in the present settlement they contested vigorously, and with much success, the attempts to enhance their rents.

These extreme instances are, however, uncommon, and the understating of rents, by tenants and landlord in combination was both more common and more troublesome. The chief offenders were the *mugaddams* and *sarbarahkars* who were themselves raiyats and relatives of raiyats and depended rather on the profits of cultivation, than on the collection of rents for their livelihood. Petty resident zamindars, such as the Mastan Brahmins of Doogaon, were on the same footing, and perhaps the greatest offenders of all were farmers of out-of-the-way villages, the property of non-resident zamindars, who realised to their advantage the principles of the unjust steward. The practice of understating rents was common in the unprotected tracts of all three districts, but was most serious in Puri owing to the comparatively small increase in the assets, whereas in the other two districts rents, even if understated, showed a great increase since the last settlement, and the zamindars would have been the real gainers by recording higher rents. Great pains however were taken to check the rent rolls with actual collection papers, and I do not think that the rents attested are often lower than the average collections, though no doubt much less than the nominal demand.

To ascertain whether the rents recorded are actually realised all proprietors were asked to file their original collection papers at the time when they preferred objections to the revenue proposed for their estates, but only a small number complied with the request, and of the papers filed, the majority were copies and very many obvious fabrications. From the figures accepted by Assistant Settlement Officers in Cuttack, the following abstract has been prepared for 82 of the principal estates; the figures show from five to ten years demand:—

				Rs
Opening balance	...	...	.	1,65,404
Demand	...	...	...	10,95,642
		Total	...	12,61,046
Collections	...	...	...	10,29,368
Remissions	...	...	...	31,642
Arrears	...	...	...	2,00,036

It will be seen that the collections are 94 per cent. of the admitted demand; that the outstanding arrears increased by Rs. 34,632, and that Rs. 31,642 were remitted. The total amount out of pocket was Rs. 66,274, or 6 per cent., and this included the very bad year of 1895-96 in which there was both flood and drought. Generally collections vary from 90 to 98 per cent., but fall as low as 43 per cent. in the flooded Pargana of Kuhunda Jaipur. I do not believe this last figure to be correct, but collections have been bad owing to a succession of floods from 1891 to 1896. Bad collections in Sargara are chiefly due to disputes between zamindar and raiyats, and in Suhang and Kodinda to floods and damage by sand.

On the whole, I assume for Cuttack that 95 to 100 per cent. of the demand may be collected in the protected and irrigated Parganas; and not less than 90 per cent. in the Parganas exposed to flood and drought, except in villages damaged by sand. For the most heavily-flooded tracts, the demand is of a more or less fluctuating nature* but I think that 90 per cent. of our settled assets will on an average be easily collected.

(a) See paragraph 343.

Statement showing the collections in the Estates with Revenue exceeding Rs. 1,000 in the District of Cuttack.

Name of Pargana.	No. of Estates for which information is available	No. of years for which figures are given.	Opening balance.	Current demand.	Remission.	Collection.	Closing Balance.	
1	2	3	4	5	6	7	8	9
			Rs.	Rs.	Rs.	Rs.	Rs.	P. c.
Matkatnagar ...	6	...	7,192	54,325	545	53,231	7,741	98
Saraswati ...	2	...	2,871	27,715	42	26,726	3,848	96
Painda ...	4	...	10,629	83,944	57	80,458	14,058	95
Kanchikhand ...	1	10	307	8,956	152	8,769	342	98
Tiran ...	3	5	42,185	1,26,069	51	1,35,637	32,566	107
Kate ...	4	5	...	9,236	...	8,044	1,192	87
Hariharpur ...	7	...	21,387	87,367	...	85,488	23,266	98
Kodinda ...	4	...	4,730	72,042	829	63,559	12,385	81
Kubunda Jaipur	1	3	5,646	9,739	...	4,153	11,232	43
Sargara ...	1	3	...	603	...	388	215	64
Hatimunda ...	1	10	3,908	69,281	1,254	66,086	5,850	95
Kernalkhund ..	1	8	950	17,568	...	16,403	2,115	94
A'pila ...	1	5	3,602	14,881	636	14,466	2,881	98
Suhang ...	1	3	3,041	7,008	1,750	4,320	3,979	61
Cuttack Haveli	1	4	...	1,617	58	1,238	321	77
Khandi ...	6	5	6,805	35,884	58	35,749	6,882	99
Kurnia ...	1	5	1,279	5,774	Not given	5,382	1,671	94
Bardiala ...	1	5	11,052	27,324	1,570	28,660	8,146	105
Alti ...	9	...	22,886	3,07,741	24,417	2,72,976	33,234	91
Padampur ...	6	...	9,093	56,188	137	51,629	13,615	92
Karimul ...	5	...	2,637	27,814	...	25,572	4,879	92
Benahar ...	14	5	5,204	36,940	86	34,381	7,677	92
Bakhrabad ...	3	5	Nil	7,595	Not shown	6,154	1,441	82
District Total ..	83	...	1,65,404	10,95,642	31,642	10,29,368	2,00,036	94

Collections in Puri.

348. Mr. McPherson in his reports on the Puri District gives the following account of his

enquiries :—

"An elaborate examination was at the time of completion report work made of a large number of old *patwari* papers brought from the Puri Collectorate. The papers were more or less selected at random. They ranged over many years from 1880 onwards.

"The results of the examination are detailed below. The *banyasti* figures are entered separately and printed in bold figures.

" Name of pargana.	Total demand (arrear included).	Total collection (arrear included).	Percentage of collection.	REMARKS.
1	2	3	4	5
" Kotrahang ...	48,387	46,032	96	Excluding Killa Baliani, where I suspected the accuracy of the returns.
	8,140	7,720	89	
" Paschimduai ...	97,885	94,318	96	
	1,766	1,548	87	
" Kotdos ...	1,10,000	98,000	90	
	8,732	8,416	96.4	
" Lambai ...	42,039	45,495	101	
	15,917	14,487	90.1	
" Chaubiskud ..	4,704	4,467	95	
	25,431	22,265	87.5	
" Serai ...	1,867	1,832	98	
" Rahang ...	32,042	29,447	92	
" Total ...	3,71,701	3,50,044	90.2	
	25,209	23,983	95	

349. In Balasore Mr. Kingsford * estimates the proportion of the demand realised as varying from 70 per cent. in the case of small estates belonging to non-resident landlords to 90 per cent. in the case of large and well-managed properties; and 80 to 85 per cent. as the minimum for the average estate in the District.

This appears to be very poor considering how much lower rents are in Balasore than in the other districts, and that the zamindars are considered to be more powerful and arbitrary in their dealings with the raiyats. In Balasore however, the demand is not in many estates fixed or even known to the tenants. I am therefore inclined to think that on the whole 87½ per cent. or 14 annas in the rupee of demand is collected.

350. I have already alluded † to the alleged difficulty in collecting from proprietary tenure-holders, and some interesting figures have been filed by Rai Hariballabh Bose Bahadur relative to the collections from *mufassals* and *sarbarahkars* in Balasore. The figures relate to 87 tenures and to a total demand of (including cesses) Rs. 1,00,887; of this 91 per cent has been collected, while the expenses incurred in rent suits are 1½ per cent of the demand. Thus only some 90 per cent. of the demand was realised; a very poor result seeing that the zamindar's allowances are only from 10 to 20 per cent. of the gross assets of these villages and not more than a quarter to a third of the amount to be collected from the *sarbarahkars*. This matter, however, does not properly belong to this chapter, in which I am only concerned with collections from raiyats.

Some guide to the percentage that may reasonably be expected to be realised may be obtained from a comparison with the figures of the estates under Government management. In Kujang and Kanika, which are liable to suffer both from drought and inundation, the collections during five years have reached an average of 92 per cent. practically the whole demand being realised except after the flood and drought of 1896. In Madhupur the collections average 96 per cent. their having been a very bad year in 1893 when little more than two-thirds of the rents were paid.

In Khurda for the last fifteen years collections have averaged more than 94 per cent. and in the recusant estates of Sorai, Chaubiskud, and Rahung only 90 per cent. has been collected on an average in the last ten years. It is to be remembered however that the bulk of remissions were made for lands near the Chilka in Khurda (zilla Balbhadrapur) as well as in Sorai and Chaubiskud.

Putting together all the figures thus compiled I think that we shall not be far wrong in assuming collections as varying from 87½ to 94 per cent. in unprotected tracts and from 92 to 100 per cent. in protected and irrigated villages; or, on an average, 90 per cent. for the unprotected and 95 per cent. for protected estates.

351. It is a universal complaint of all landlords that it costs more to collect rents than it did formerly, and the expenses, under this head are variously stated at from 10 to 20 per cent. of the *mufassal jama*

To the petty resident zamindar with a compact estate the cost is practically nothing, and even if he does not collect himself he can get one of the tenants to act as his *gumashta* for a trifling consideration. If however the estate consists of many scattered parcels of land or if the small zamindar, by which I mean a proprietor with *mufassal* collections of Rs. 500 or less, resides at a distance he is absolutely at the mercy of the men whom he appoints to act for him. He cannot afford to pay a *tahsildar* for his whole time and must be content to collect through a resident village headman or well-to-do raiyat, generally a *Karan* by caste, in each village, paying him amounts small in themselves but large in proportion to the rental; otherwise, he must go round himself from village to village and do a little work for his living, which is just what he (in many cases) does not want to do. On the whole, however, I do not think the petty zamindar has any right to complain. If he looks after his property and makes his own collections he will realise the most if not the whole of the demand at a most trifling cost; if he does not choose to take this

* Paragraph 214 of Balasore report.

† Paragraph 299.

trouble, he must be prepared to surrender a considerable portion of his income in return for the luxury of ease.

The larger estates have a much more elaborate organisation, and it is in their case that the complaint of expense is most strongly pressed.

The best managed are generally those of the Bengali proprietors who appoint capable *naibs* to look after their interests. The large estate of Utikan belonging to Rai Manomatha Nath Mitter, and the estates of the Tagores in Hariharpur, and those of Umesh Chandra Mandal in Balasore and Cuttack are excellently managed; so too are the estates of Babu Kailash Chandra Rai Mahashai and of Rai Hariballabh Bose Bahadur, the Government pleader of Cuttack; but many of the oldest families, such as Kritibas Das Chaudhri of Binjharpur and Balaram Bhramarbar Ray have no proper system of control or collection.

Mr. Kingsford writes:—

"The estates of Raja Baikuntha Nath De and Babu Radha Charan Das of Balasore Rai Hari Bullabh Bose of Cuttack and Narendra Narayan Rai Mahashai are amongst the most efficiently managed. The late Abdul Manan Mian of Bhadrak displayed considerable energy and ability in this direction; his sons take little interest in the property. Among proprietors who have enjoyed some commercial training like Babu Hemendra Chandra Mondal, or who have business instincts like those above noted, there is naturally a propensity for systematic organisation and for an efficient method of accounts. The Lakshman Nath Mahashai already referred to preserves an excellent system of accounts and closely supervises the management of his estates. But with others who have come less into contact with commercial ideas and exhibit a preference for obsolete standards, whose only recommendation is their age, there is often to be observed sheer absence of organisation coupled with a system of accounts intelligible only to the *tahsildar*."

It is quite impossible to give any estimate of the cost of collecting where there is neither system nor supervision and where a number of jealous co-sharers are wrangling with one another over their respective rights, but I have made some enquiries as to the establishment required in a well managed property of fair size.

Mr. Kingsford gives the following establishment for the estates of Babu Radha Charan Das with a *mufassal jama* of Rs. 11,000:—

					Per month.		
					Rs.	A.	P.
One <i>naib</i>	...	...	...	...	12	0	0
One "	...	...	...	...	8	0	0
Two <i>muharrirs</i> at Rs. 5	...	...	...	...	10	0	0
Two " " 4-8	...	...	...	...	9	0	0
Two <i>cutcherry</i> guards at Rs. 2-4	...	...	...	...	4	8	0
Five <i>chatis</i> and <i>naydis</i> at Rs. 2-8	...	...	...	...	12	8	0
Contingencies	...	...	...	...	1	0	0
Total					57	0	0

The annual cost is thus Rs. 684 or 6 per cent. excluding recourse to litigation which is not usually an item of considerable expense. But such a staff is not only engaged in collecting rents. In addition to miscellaneous work they manage the paddy-lending business of the zamindars, which is a source of income often almost as important as that derived from the zamindari proper. Debiting the cost of maintaining the *cutcherry* and of a portion of the establishment at Balasore to the account of the "*mahajani*" business, 6 per cent. will still be somewhat more than should be fairly taken as the cost of rent collection. Probably no increase of staff will be necessary to collect the settled rents, but litigation may occasionally prove requisite, and on the whole the cost is not likely to decrease.

This seems to me a fair estimate of the cost of collecting rents in a large and compact property. In an estate such as the Patamundai *taluk* the cost would probably be about 5 per cent. and might be as high as 10 per cent. in smaller estates with a demand of Rs. 1,000 to Rs. 5,000. Of course in some estates the expenses are heavier. In the Gopinathpur *taluk*, which consists of lands scattered over several villages in six Parganas with a total *mufassal*

jama of Rs. 8,000 raised by this settlement to Rs. 9,300 odd the staff for collection is—

	Per month.
	Rs.
One manager	25
Six <i>muharrirs</i> at Rs. 4 each	24
Six <i>tahsildars</i> at Rs. 7 each	42
Five <i>chuprassies</i> at Rs. 2 each	10
Two <i>muharrirs</i> at Rs. 5 each	10
Total	111

or Rs. 1,332 per annum.

They make collections for this estate and some petty estates worth Rs. 500, so that the establishment alone swallows up 16 per cent. of the rental. This is of course an extreme case, and may be taken to represent the highest level of cost of collection.

352. Adding cost of collection and litigation to the amount irrecoverable by reason of default and remissions the deductions to be made may be assumed at from 12½ to 25 per cent. and on an average about 19 per cent. in unprotected and partially protected estates. It would be difficult to give figures to bear out this estimate, but it is certainly not far wrong. Collection expenses alone vary from 5 to 10 per cent. in ordinary estates, and I have assumed that collections vary from 87½ to 100 per cent. Expenses of litigation, though a great deal is said about them, are small except where a landlord is a bad manager or unpopular, and after the tenants have become accustomed to the new rents should not exceed 2 per cent. The minimum profit that reaches the proprietor's pocket may therefore be taken at 70 per cent. (i.e., allowing collections of 88 per cent.,—16 per cent., for ordinary collection expenses, and 2 per cent., for litigation), and in a vast majority of cases the nett collections should be not less than 80 per cent. of the *mufassal* demand.

CHAPTER XIII.

INTRODUCTION OF THE TENANCY ACT.

353. By way of preface I would wish to express my obligation to Babu Srigopal Bhattacharjya, Deputy Collector and lately an Assistant Settlement Officer, for the valuable assistance he has given me on this subject. In two places I have already dealt with the Tenancy Act, i.e., under—

- (1) Proprietary tenureholders. (Chapter XI, paragraphs 301 to 304).
- (2) Raiyats. (Chapter XI, paragraphs 330 and 331).

It seems worth while to go briefly through the Act and consider whether so much having now been introduced, it is advisable to introduce the whole Act or nearly the whole. I may say that when I came to Orissa seven years ago the Collectors of Cuttack and Balasore (Mr. G. Stevenson and Mr. R. Cornish) as well as the Commissioner (Mr. G. Toynbee) were not in favour of the introduction of the whole Act.

It was of course impossible at that time to form any independent opinion, but I am now prepared to say that the status and classes of tenants having been recorded under Chapters II, V, VI, and VII, and the rent settlement proceedings having been held under Chapter X, there is a case for the introduction of nearly the whole Act.

In all that follows I do not wish to be considered to have overlooked section 2 (2 of the Act. I understand its meaning to be that any section of any Act (specially Act X of 1859) inconsistent with any section of the Tenancy Act introduced into Orissa is repealed. My opinion is that the area being a temporarily settled one the rent suits should be retained within the jurisdiction of the Collector who is responsible for the land revenue, but that in all other respects the relations of landlord and tenants should not now be different from the rest of Bengal. These principles should guide the introduction of the Act. It should be a matter for consideration also whether after

the new settlement has been in force for five years the whole Act should be introduced.

I propose therefore to examine in detail the different sections of the Tenancy Act, and to submit a few remarks as to their applicability to Orissa.

354. Section 1 is formal and calls for no Detailed examination of the remark.
unextended sections.

Section 2. Only clauses (2) (3) and (4) ought to be extended, as clause (2) will prevent a conflict of interpretation between the sections already extended, and the corresponding sections of Act X of 1859 repealed by necessary implication; clauses (3) and (4) will also be useful for interpretation.

Clause (1) ought to be withheld together with Schedule I in order to keep some of the sections of Act X alive. The necessity of this will appear below.

Sections 3 to 5 are already extended to Orissa.

Section 6. On tenures held since permanent settlement.

Section 18. On incidents of holding at fixed rates.

Section 50. On rules and presumptions as to fixity of rent.

These three sections would have no application, even if extended, so far as they relate to the temporarily-settled portions of Orissa, *c.f.* also sections 3, 4, and 16 of Act X of 1859.

Section 7 has already been extended.

Section 8 should be extended at once. Under the orders of the Board I have already proposed *rasadi* increase for the rents of certain *sasan tanki bazyafidars*.

Section 9 should be extended, though section 113 protects all rents fixed under Chapter X, in the case of tenure-holders for fifteen years.

Sections 10 and 11.—Rampini, J, (page 53) explains that a permanent tenure is created (1) by law, (2) by contract, and (3) by custom *or the course of dealing therewith*.

The proprietary tenures of Orissa are instances of permanent tenures in the last sense.

There is no reason why section 10 should not be extended. It imposes no new penalty on the *sarbarahkars* at any rate.

Section 11 needs careful consideration. Mr. Rampini remarks that the provisions of this section make a change in the law, for hitherto some permanent tenures have been transferable, and others non-transferable. Now all permanent tenures are made transferable and heritable "subject to the provisions of this Act." These words, no doubt, have reference *inter alia* to the provisions of section 183, which lay down that nothing in this Act shall affect any custom, usage or customary right not inconsistent with or not expressly, or by necessary implication modified or abolished by its provisions. It is, therefore, an open question whether permanent tenures, not transferable before, are made transferable now. (Rampini, page 45, Second Edition).

Babu Srirum Chandra Bose, Deputy Collector, late an Assistant Settlement Officer, gives his opinion, that—

Sarbarahkari tenures are neither saleable nor divisible without the consent of the zamindar, *vide* I. W. R. 322 I. L. R. 9, Cal. 526 and I. L. R. 11, Cal. 699.

Muqaddami rights can be transferred in part without the zamindar's consent, and the zamindar is required to register the name and extent of interest of the transferee, but he is not bound to divide his rental and take a proportionate share of it from the latter, *vide* section 27 of Act X of 1859.

In case of succession to a *muqaddami* or a *mirusi sarbarahkari* tenure, the zamindar is bound to register the names of all the heirs of the deceased tenure-holder, but the latter remain jointly responsible for the rent, and the landlord is not bound to split up his *jama*.

"Notice of division must in all cases be given to the zamindar, and it is the interest of the new tenure-holder to have his name recorded in the landlord's *serishtia*.

As a matter of fact, permanent tenures are frequently transferred and bequeathed in Orissa, although the High Court have held in some cases that the *sarbarahkari* tenure is not transferable without the zamindar's consent.

In practice *sarbarahkari* tenures are always sold without the zamindar's consent and *after* the sale the purchaser generally silences the zamindar's opposition by giving him a foe at the time of registration of his name in his

serishta. Practically, therefore, the zamindar's vetoing power consists in demanding a fee at the transfer of the *sarbarahkari* tenure. In my remarks below on sections 12 to 17, I propose to maintain the zamindar's right to a fee with this difference, that whereas now the scale of fees is very uncertain and varies according to the strength and weakness of the practice, if the sections be extended the equitable scale of fees provided in the law will protect the interests of the weak zamindars or of the weak *sarbarahkars*, as the case may be, from coercion by the strong party on the other side.

Muqaddami kharidas and other permanent tenures are freely transferred and bequeathed. I do not think that Orissa zamindars have any better grounds for taking exception to section 11 than the Bengal landlords have, and I would recommend its extension to Orissa as it will only legalise a right that has already the sanction of custom.

Sections 12 to 17. I have already suggested that these sections should be extended. The advantages are that they provide a fee and practically compel the zamindar to keep a *serishta*, whereas under section 27 the *serishta* is generally in a state of chaos. The moderate scale of the fee is certainly a point in the tenure-holders' favour. In Balasore some of the new tenure-holders complained that they could not obtain registration in the zamindars *serishta* on account of the exorbitant demands of fees made by their landlords. This will not be possible under the new rules.

Section 18 (see remarks on section 6).

Sections 19 to 49 have already been extended.

Section 50 (see remarks on section 6).

Section 51 may be extended. A tenant is to be presumed, until the contrary is shown, to hold at the same rent and under the same conditions as in the last preceding agricultural year.

Sections 52 to 75 have already been extended.

355. Sections 76 to 83. Out of these section 80 has already been extended. The sections are more or less related

Extension of Chapter IX.

to one another and section 80 having been extended, the others may come in as well. Although 'improvements' have not been effected by the raiyats on a very wide scale, there are none the less many individual instances of improvements effected on their holdings by the raiyats, more specially in the sea-side Parganas, such as Bhograi, &c., in the Balasore District and in other parts. The difference, if any, in this respect between Orissa and Bengal is one of degree only. Sections 76 to 79 and 81 to 83 may be extended to Orissa.

Section 84. There is no reason why the section should not be extended except that the intervention of the "Civil Court" in such a small matter will be rather anomalous in Orissa, where Revenue officers perform the functions of the rent courts of Bengal. No practical inconvenience is felt for the absence of this section.

Section 85 will probably be a dead letter for some years to come, but there is no objection to its extension.

Sections 86 and 87. *Surrender* and *abandonment* prescribe formalities which the Uriya raiyat and his zamindar will not follow for many years. I do not think that Section 19 Act X of 1859, which contains corresponding provisions is much followed. Section 87 might be of use to raiyats who may be obliged to abandon their holdings if a serious famine occurred. This section may also be useful to migratory raiyats in the sea-board Parganas (e.g., Bhograi, Ankura in Balasore District) where instances of voluntary surrender or abandonment are common among people who come from distant villages, cultivate for a season or so and many of them perhaps never resume the cultivation. To meet such cases these sections may be useful to the landlord. I recommend the extension of these sections.

Section 88 is, I think, necessary, more especially if Section 17 is introduced. Section 88 already applies by custom to *sarbarahkari* tenures. It is however somewhat contrary to the incidents of *muqaddami* tenures, divisions of which are permitted by Section 27, Act X, and are recognised by custom.

The Government Pleader (see his opinion, Chapter XI, paragraph 306) says, that it would be only just and proper to make Section 88 applicable to *muqaddami* tenures with similar incident rights as to alienation and Subdivision.

Section 89 may be extended, especially as Sections 25, 44 and 49 have been extended. The terms of Section 89 are wider than those of Sections 21 and 22 of Act X which refer only to decrees under the Act (Act X).

Sections 90 to 92 are fair and may be introduced. The landlord could not under Act X measure rent-free lands within his estate (Rampini).

Sections 93 to 100. Appointment of common manager. It is very necessary to introduce these Sections at once (see Chapter VIII, paragraphs 270 and 273).

Chapter X. Sections 101 to 115 have already been introduced.

356. We have interpreted the spirit of this Chapter and have extended it to the *nij-jot* of proprietary tenure-holders. The instructions given to officers run as follows:—

Extension of Chapter XI.

Nij-jot is still governed by Act X of 1859, but the spirit of the Tenancy (Act definition must be followed, with the exception of clause (1) (a) of that section (Section 120). The real guide will be the custom of the country.

The Board have already (see correspondence on Mr. Nathan's Kotdes report ending with Government order No. 2604L.R., of 10th May 1894) held that legislation on behalf of proprietary tenure-holders' *nij-jot* is unnecessary as being too small a matter. Section 116 can, I think, without great straining include sub-proprietors, more especially as in the last Settlement papers as well as now the same word *nij-jot* and *khudkast* are applied equally to the private lands of proprietors as to those of proprietary tenure-holders. I submit that it is necessary to introduce the Chapter. See also Chapter XVIII, paragraph 458, and Appendix A (2) b, paragraph 14.

357. Chapter XII on Distraint.—Sections 121 to 142 deal with distraint, Section 121 gives jurisdiction to the "Civil Court"

Extension of Chapter XII on Distraint.

to entertain applications for distraint. It is, therefore, doubtful whether in rent suits Deputy Collectors can legally exercise the powers under this Chapter if it be bodily extended to Orissa. This technical objection will not apply to the other sections as they speak of 'courts' a term that equally applies to the courts of the *rounsiffs* as well as of the Deputy Collectors.

Assuming that rent suits will continue to be tried by the Collectorate staff, it is hardly necessary to amend the law in order to make this Chapter operative in Orissa, as the existing provisions of Act X of 1859 on the subject of distraint are sufficient for the necessities of this Province. These provisions will survive if Chapter XII be not introduced. I do not recommend the extension of this Chapter at present.

358. Chapter XIII on Judicial Procedure.—Sections 143 to 158 need careful consideration. The framers of the Tenancy

Extension of Chapter XIII.

Act recognised the necessity of providing the zamindars with some facilities for realising arrears. The judicial procedure in this chapter resembles the Small Cause Court procedure in many respects. In view of the large increase of the Government revenue in Orissa at this settlement I see no reason why the Orissa zamindars should not have the advantages that were conferred on the Bengal landlords by the simplified procedure in the trial of the rent suits.

I think the provisions that the summons should be for final disposal [Section 148 (c)], that the summons may be served by post [Section 148 (d)], that the written statements should not be filed [Section 148 (e)], and the abbreviated form of recording evidence [(Section 148 (f))], are decided improvements over the existing Act X procedure, and that the introduction of these will materially assist the prompt disposal of rent suits.

The other sections of this chapter will also be more or less useful. I may particularly notice Section 133 (b). It may be possible to vest some of the officers of proved ability with this power when circumstances call for a wholesome restraint on appeals to prevent needless harassment of the zamindars. Again, the provision for prompt execution of decrees contained in Section 148 (g) is likely to be conducive to the best interests of the zamindars and of the Government revenue.

While holding the above views about the useful character of the procedure sections of this chapter, I would at the same time maintain my opinion that the existing jurisdiction of the revenue authorities over the rent suits should

be retained. The Collectors and Deputy Collectors under the supervision of the Commissioner (Section 151, Act X) have all along been trying these suits. The experience obtained by the revenue authorities at the settlement may be brought to bear on this important work to the advantage of all parties. I would therefore suggest that the most careful attention of the District Officers may be directed to the working of the rent suits and the effect of the new Settlement in Orissa.

I accordingly recommend that except Section 144 the rest of this chapter be extended to Orissa, after due consultation with the Commissioner and the Collectors.

The withholding of Section 144 will remove the rent suits from the purview of the Civil Courts, Original and Appellate, and the jurisdiction sections of Act X will therefore survive. Thus the Original Jurisdiction of the Deputy Collectors and the Appellate Jurisdiction of the Collectors, of the Judge and of the High Court will be retained.

The proviso to Section 153 will give the Judge a new and a wider revisional power, but there can be no objection to this (*c.f.*, Section 160, Act X).

359. Chapter XIV. Sections 159-177, on Sale for Arrears under Decree.

Extension of Chapter XIV. There is no objection to the introduction of this chapter. Section 163, which allows attachment and proclamation to be issued simultaneously will be very useful for the prompt satisfaction of the decrees.

It may be noted that Act VIII (B.C.) of 1865 is found very useful by the zamindars in the sales of tenures. They will not be deprived of this advantage by the introduction of Chapter XIV of the Tenancy Act.

Mr. Rampini says that Act VIII (B.C.) is not repealed by the Tenancy Act, so that tenures on which the right of selling has been especially reserved continue saleable under Act VIII (Rampini, Second Edition, paragraph 232). I may add that Section 4 of Act VIII of 1865 reserves under the jurisdiction of this Act (VIII of 1865) such under-tenure as are saleable under Section 105 of Act X of 1859. I am of opinion that neither Act VIII of 1865 nor Section 105 of Act X will be repealed by the introduction of this Chapter XIV.

360. Chapter XV. Sections 178 to 183 should be extended immediately.

Extension of Chapter XV. They have apparently been omitted by oversight. Section 178 is absolutely necessary to prevent raiyats contracting themselves out of their occupancy rights under Section 7 of Act X. During the *khanapuri* inspection of 1892-1894 we invariably interpreted the Section as if it was extended. Section 183 is also specially necessary.

Chapters XVI and XVII. Sections 184 and 185 may be introduced; the provisions are stronger than those of Section 119 of Act X. Sections 187 and 188 may be introduced. They will apply only to such sections of the Act as may be introduced. Sections 189 to 192 are already introduced. Sections 193 to 196 may be introduced at once.

Schedule I ought not to be introduced, in order to keep some of the sections of Act X operative in Orissa. This schedule taken with Section 2, clause (1) will repeal the whole of Act X. I have therefore withheld clause (1) of Section 2.

Schedules II and III may be introduced at once.

361. To sum up, I think that the status and rights of the tenants having been recorded under the portions of the Tenancy Act already in force in Orissa, the extension of many provisions of the Act is absolutely necessary, as I have noticed in the preceding remarks.

Summary. As regards some of the remaining provisions it may be generally remarked that although they may not be indispensable still they may be useful. The Tenancy Act embodies some of the advanced ideas regulating the relations of landlord and tenant that find no place in Act X of 1859. Now that we have already extended most of the sections dealing with substantive rights a large part of the procedure sections may as well be extended in order to give the zamindars better facilities for the realisation of their arrear rents. For reasons already recorded I would reserve at the same time the jurisdiction of the Collectorate staff over these suits. In order to effect this object some of the sections have to be kept back.

Turning next to details, I submit that—

(a) Section 3 to 5, 7, 19 to 49, 52 to 75, 80, 101 to 115, 189 to 192 are already introduced.

(b) The following sections must, I submit be introduced at once (being dependent on sections already in force or because they have been already used by the Settlement Department), Sections 2 (2) (3) (4), 8, 9, 51, 76 to 83, 89, 116 to 120, 178 to 183.

(c) The following sections may be introduced at once, *i.e.*, after reference to the Commissioner and Collectors:—

10 and 11, 12 to 17, 88, 93 to 100. For the benefit of zamindars and proprietary tenureholders.

84. Acquisition of holding by the landlord.

85 to 87. Surrender and abandonment

90 to 92. For the benefit of the landlords.

143, 145 to 158. Judicial procedure, section 144 on Jurisdiction being hold back.

159 to 177. On sale for arrears.

184 to 185. Limitation.

186. Penalties for illegal interference.

187 to 188. Regarding representation of landlords.

193 to 196. Pasturage, &c., conditions binding on landlords and savings for special enactments.

Schedules II and III.

(d) The following sections would be inoperative except in permanently settled areas:—

6, 8 and 50; as somewhat analogous provisions exist in Act X (see sections 3, 4 and 16) they may be introduced.

(e) The following sections should not be introduced for the present:—

Section 1, which will more properly come in when the whole Act comes into force.

Section 2, clause (1) which ought to be withheld in order to keep alive a part of Act X.

Sections 121 to 142 on Distraint.

Section 141, on Jurisdiction in Tenancy Act proceedings.

Schedule I, which must be kept back with clause (1) of Section 2.

I venture to suggest therefore that the sections recorded in (b) should be introduced without delay, and that those in (c) and (d) be introduced after reference to the District Officers and the Commissioner.

As regards the sections mentioned in (e) I cannot recommend their introduction at present, but having introduced nearly the whole Act I would suggest that the most careful attention of District Officers may be directed for the next five years to the working of rent suits and the effect of the new Settlement in Orissa. After that period it will be possible to gauge the result of the introduction of the portions of the Act extended to Orissa and to determine whether special courts are to be constituted. In case the whole Act is to be extended after five years the Judicial Department of Government will have time to provide the machinery for the trial of rent suits.

The principle which I would suggest in introducing the sections of the Tenancy Act at once should be the extension of all sections except those which provide for trial by the Civil Court of rent suits (including suits by proprietors against proprietary tenureholders) and the sections auxiliary to this procedure. In following this principle it is probable that I have proposed certain sections for introduction which should be excluded and have omitted others which should be included. The district and legal officers will easily be able to correct these mistakes.

Part IV.

CHAPTER XIV.

GENERAL INTRODUCTION TO THE CHAPTERS ON PROCEDURE.

362. We read that the proceedings in connection with the early British settlements of Orissa (from 1803 to 1843) occupied

Duration of Settlement.

"A full third of a century and during the first twenty years the master masons (who built the edifice of rights) had to labour with the sword in one hand and the pen in the other." I may add that assessment records of the last settlement (1834—1843) bearing dates as late as 1845 are in fact found. If therefore we add the ten years of the present proceedings (1889—1899), we find that for half a century Orissa has been more or less occupied with Settlement operations.

363. The attitude of the people has been tolerant throughout the present proceedings while that of the zamindars has been

Attitude of the people.

extraordinarily apathetic. Work has been stopped in certain areas owing to flood, scarcity, and sickness and even through fear of a well-known tiger, but never on account of obstruction. A few attempted obstructions were overcome. At Remna in Balasore stone-throwing into the camp at night was effectually stopped by the capture and immediate castigation of the ringleader. The tiger was kept away by the help of the local trumpeter (holder of a *turia j'gir*) who was requisitioned to escort iniyats home from the attestation camp at night.

In another case the army (*paiks*) of Keonjhar captured and deported a *sarbarahkar's* son, but did not appear before the officer deputed to relay the boundary. In fact the army remained in hiding while the Assistant Settlement Officer, a well-armed *shikari*, completed his work in the presence of the raiyats both from Keonjhar and the Mogulbandi. Assistant Settlement Officers were in some cases treated badly by the villagers with whom they camped, but the bad treatment was generally traced to the machinations of a dismissed zamindar's servant or *sarbarahkar* or disappointed litigant. One or two thefts of public money occurred, but it so happened that in each case the cash box was stolen from under the bed of the nazir while two peons were on guard outside his tent. Such thefts, so cleverly managed, were of course ascribed to professional thieves, but no cases occurred after the revision of the rules for security bonds of nazirs.

364. There has often been severe sickness in the camps, and for one field season, during which work was going on in the

Casualties to officers.

Banpur-Mals and in the north of the Balasore District, medicines were purchased and distributed to the camps of Assistant Settlement Officers. We have lost many valuable *muharrirs* from fever and a few from cholera, but I am very thankful to say that with three exceptions the gazetted officers have been spared. The valuable lives of Mr. Reily, Settlement Officer, and Babu Chakulal Sirkar, Assistant Settlement Officer, were lost by accidents, while Mr. H. A. Boyd died of typhoid fever brought on by exposure. In many cases, however, serious illnesses and in one case madness of Assistant Settlement Officers have been caused through over-work. Not a few officers also have suffered damage to their eyesight.

365. Sir Charles Elliott paid no less than four visits to Orissa between 1892 to 1895. Sir Alexander Mackenzie held a conference at Cuttack in January 1897 at which

Inspections by Lieutenant-Governors.

many important questions, *e.g.*, term of settlement and percentage of assets to be retained by Government were fully discussed and finally settled. In December 1898 Sir John Woodburn visited Cuttack and Puri. He inspected the assessment work and allayed the fears of the zamindars as to the curtailment of their privileges by the terms of the *kauliyats*.

366. The members of the Board of Revenue under whom the work has been carried on have been the Hon'ble Mr. (now

Members of the Board.

Sir, C. C. Stevens and the Hon'ble Mr. G. Toynbee. The former visited Orissa in March 1896 and framed or revised the

principal fair rent rules. He again visited Orissa in January 1897 and attended the conference held by Sir Alexander Mackenzie. Mr. Toynbee has either framed or revised the rules for assessment of revenue, and has dealt with the assessment reports of a large number of estates.

367. When settlement work began Mr. M. Finucane, c.s.i., was Director of Land Records. He drew up the earliest programmes, estimates, and rules. He was succeeded by Mr. W. C. Macpherson early in 1892. Mr. Macpherson went on leave early in 1896 till the end of the year. During this time Mr. P. C. Lyon officiated and again took charge permanently in the end of 1897. Between May 1892 and February 1896, and again in 1897, Mr. Macpherson either drafted or revised the rules and forms for record-writing and attestation, and laboured with all the officers of the Settlement staff in Orissa and elsewhere to amend the settlement provisions of the Tenancy Act and the rules under it, and to establish principles for the settlement of rents and revenue in Orissa. During the period of his deputation to Orissa (July to September 1897) he worked out the subjects to be included in the revenue reports and settled many important principles of assessment. Mr. Lyon was responsible in 1896 for the amalgamation of all the settlement work in the Province under one head and for the location of covenanted assistants in Cuttack, Balasore, Puri, and Khurda. He drafted all the important rules and returns for settlement of rents in 1896 for Orissa and for Khurda, and from 1897 onward has controlled the procedure for assessment of revenue, dealing with recusancy, &c.

368. The officers in charge of the Survey in Orissa have been Mr. Patterson, Mr. Ewing, Colonel Sandeman and Captain Crichton. Colonel Sandeman first, and Captain Crichton afterwards, helped the Settlement Department under Mr. W. C. Macpherson and Mr. W. Maude to evolve the rules for the working together of the camp and circle officers and Colonel Sandeman organised the whole survey campaign in Orissa. Mr. Maude in his report for 1893 acknowledges the services of Captain (then Lieutenant) Crichton as follows: "His thorough acquaintance with details and constant appreciation of the necessity of the Survey and Settlement Departments working as one, made my introduction to the work a particularly pleasant one."

Of the Assistant Superintendents of Survey Mr. R. C. Ewing and Mr. A. W. Smart did good work both in the course of the Orissa and Khurda settlements. They organised the work, kept it up to the mark, and exacted accurate results from enormous establishments.

369. The settlement work was first actually started in 1889 in the Puri District under Mr. A. K. Roy and Mr. D. N. Mukherji. Mr. H. R. Reily was appointed Settlement Officer of Orissa in 1891, and at his death in October 1892, Mr. Maude was appointed. Mr. Reily had not time to thoroughly organise the work or to bring out detailed rules. When Mr. Maude joined, he completely re-organised circles and programmes, re-cast scales of establishment, and after securing uniformity of office procedure, evolved the detailed rules for *khanapuri* and attestation which were subsequently followed. Mr. Maude left in February 1896; Mr. Nathan, Mr. Radice, and Mr. Walsh had given Mr. Reily valuable assistance and the two first continued to do so under Mr. Maude. Mr. Walsh left the department in the end of 1892, Mr. Radice in 1893, and Mr. Nathan in 1894. No doubt if the health of Mr. Nathan had been able to stand the strain he would have succeeded Mr. Maude. The work of Mr. Walsh and Mr. Nathan in Puri has been most useful at the time of assessment. Mr. Nathan's report on Kotdes has proved a very valuable contribution to the literature of the settlement of Orissa. He had the advantage of close consultation with Mr. Maude and with Mr. W. C. Macpherson. The work of Mr. Sen and Mr. Mitra should not be passed over. Mr. Sen had a very remarkable knowledge of Orissa. The valuable work done by Mr. J. G. Cumming in the early part of 1894 also deserves recognition. I cannot of course do more than mention the work of Mr. Maude; he restored method, order and uniformity at a most critical stage. A great deal of the work already done had to be done over again by Mr. Maude, and his careful methods and supervision secured cheap and efficient results in re-attestation.

370. I joined as Mr. Maude's Assistant in October 1892. In October 1894 the charge of Balasore was separated from that of Orissa, under myself as Settlement Officer. In February 1896, on Mr. Maude's departure, Balasore was re-united with the rest of Orissa and the whole was placed under my charge. The revision of the Khurda Survey had started in November 1895, so that the whole area in February 1896 amounted to nearly 6,000 square miles, some 80 lakhs of plots and about 17 lakhs of tenants. The greatest strain of work was in year 1896-1897, when our staff consisted of 46 officers, and the year's programme was to settle rents for 8 lakhs of tenants. Four covenanted Assistants and a European Deputy Collector were in direct charge of Puri (1), Cuttack (2), Balasore (1) and Khurda (1). The most anxious period was the beginning of the fair rent work; but the timely visit of the Senior Member of the Board (Mr. Stevens) and the Director (Mr. Lyon) in March 1896, and the formation of the rules, gave confidence to the staff and pacified the agitations of *baryastidars* and others. The organisation of the settlement of the Province under one head with Assistants in charge of Districts was made by the Director (Mr. Lyon) who had had experience of work on a large scale in Bihar, and by the alteration in certain account rules as to countersignature by Assistant Settlement Officers in charge of all bills for fixed establishments, the time of the Settlement Officer was set more free for inspection. Mr. W. B. Thomson joined the Department in 1894, and remained for more than 2 years till his health failed early in 1897. For nearly a year he was in charge of Balasore and rendered great service in the inspection of fair rent work. He gave us many practical suggestions for the assessment rules. Mr. D. H. Kingsford joined in the end of 1895, and after service in Khurda, Puri and Cuttack as Assistant Settlement Officer in charge relieved Mr. Thomson early in 1897. For 2½ years he rendered conspicuous service as Assistant Settlement Officer in charge of Balasore. He has still less than 5 years' service in India, so that his organisation in that District, inspection of fair rent work, judicious assessments to revenue, and lastly his very able report on the settlement of Balasore are most remarkable. Mr. J. E. Webster joined in March 1896 at my special request. He was from the beginning in charge of the Cuttack District, sometimes alone and sometimes assisted by other covenanted officers. It is impossible to value his work too highly. Many of the rules for procedure introduced after he joined us have been either drafted, or suggested, or improved by him, or framed by his advice. He has worked throughout with unflagging energy, ability and loyalty. His great knowledge of the present procedure as well as of the literature of the last settlement is clearly shown in the pages of this report, by far the largest portion of which has been drafted by him. Mr. H. McPherson joined in November 1896 and was in charge of Puri for more than 2 years. His capacity for organisation, his energy and ability were invaluable, and he did much to remove the slur on the early work in Puri. During his intervals of leisure as Collector of Cuttack in July-October 1898 he wrote a very interesting account of the Puri settlement. Mr. H. D. Carey joined in March 1897 and served for 2 years in joint charge on Cuttack with Mr. Webster. He worked throughout with characteristic energy and rendered special service in re-casting rules and instructions. He drew up the forms attached to the completion reports in their present shape. As Collector of Cuttack during the past 6 months he has given us great assistance.

371. Among the Deputy Collectors Mr. James Taylor deserves particular mention. He was in charge of Khurda for 2 years and supervised the settlement of rents for nearly 2 lakhs of tenants. Special acknowledgment of his important services has been made in the separate report on Khurda. Conspicuous among the Deputy Collectors are Babu Jamini Mohan Das, Babu Prasanna Kumar Banerjee, Babu Srigopal Bhattacharjya, Babu Sriram Chandra Bose and Babu Jotindra Mohan Sinha. Babu Jamini Mohan Das held a very responsible position at Jajpur, in semi-independent charge of northern Cuttack. Babu Prasanna Kumar Banerjee and Babu Srigopal Bhattacharjya were the pioneers of the fair rent work in the Province; the report of Babu Sriram Chandra Bose on Utikan is remarkably good, and Babu Jotindra Mohan

Deputy Collectors and Sub-Deputy Collectors.

Sinha did sterling work in the Deogaon Pargana of Cuttack. Of the Sub-Deputy Collectors the best work has been done by Babu Hara Krishna Mahanti in the Sunaut Pargana of Balasore. He was also in charge of large establishments at Bhadrak. Amongst the others Babu Abhoy Prosad Das and Maulavi Chainuddin deserve special notice. The services of Babu Jagannath Dutta, Sadar Kanungo of Balasore, as an Assistant Settlement Officer for nearly 4 years, have already been acknowledged in the Khurda report.

372. I cannot close this portion of the report without mention of Babu Jogendra Narayan Mitra, Personal Assistant to the Settlement Officer. Mr. Maude will, I feel sure, agree with me that for 7 years he has successfully filled a position of very great responsibility. His services as Assistant Settlement Officer and as Personal Assistant have been of remarkable value.

373. It is very invidious out of a long list of Deputy Collectors and Sub-Deputy Collectors to single out for mention so few when notwithstanding many difficulties so many worked with the greatest loyalty and devotion. Many of them remained in camp and in tents year after year and right through the year. Those who know Orissa will appreciate the hardships encountered, and others will understand when we tell them that to a European except for 3 months in the year a tent is almost intolerable. Nearly all the Deputy and Sub-Deputy Collectors joined the Department as junior officers and brought their youthful energy to bear upon the work. It would be of course a much easier task to record the names of two or three officers whose work has brought open discredit upon us, but perhaps it is only necessary to make general remarks on this subject. The appreciation of officers by the quantity of their outturn has paved the way for a great deal of bad work. It was impossible for us inspecting officers to avoid some such appraisal when the number of camps and their scattered situations are taken into account. The fact remains that a few officers, usually Sub-Deputy Collectors, desirous of promotion, have been occasionally led away by the glamour of large outturn. Again, we have had one or two officers who even before taking the field and without knowledge of the area within which their work will lie, have desired to know the number of rents to be settled every month and the general monthly percentage of enhancement which would secure to them the approbation of Government.

On the whole, however, we have had officers of the very greatest judgment and conscientiousness, possessing also the moral strength to work, where necessary, slowly and surely.

374. Not the least difficulty which we have had to encounter has been in bringing together and training suitable establishments for our work.

To start with the *kistwar* survey, an Uriya *amin* could rarely be taught to survey more than 10 acres a day, while the outturn of an up-countryman would be more than 30 acres. Moreover the work of the latter showed much more neatness of hand than that of the Uriya.

In *khanapuri* I have always preferred the Uriya *amin*, because, although it is quite impossible to prevent the exaction of payments from villagers, his scale of charges is smaller and his methods more intelligible to his fellow Uriyas. Uriya *amins* in the cases where they had been trained before being sent into the field did excellent *khanapuri* work. Attestation work, and fair rent work, so far as *muharrirs* were concerned, is purely mechanical, but no praise can be too high for the head *muharrirs*, i.e., the men picked to command and control batches of *muharrirs* in each camp. They received pay of from Rs. 20 to Rs. 30 a month, and were the first to come in the early morning and the last to leave at night. The names of these men have been submitted to Collectors with recommendation for permanent employ. It is hoped that they will get posts as *kanungos* (and *patwaris* if the Maintenance of Land Records scheme is introduced). They are also to be recommended to zamindars as *gumasthas*.

The demand for English knowing clerks was difficult to supply. The reason of course was that, outside the Government offices, there had hitherto been no use for clerks with knowledge of English. At first we obtained nothing but "rolling stones" and men who had escaped from the Criminal

Courts on technical grounds, *e.g.*, my first clerk on Rs. 20 had been a Municipal overseer on Rs. 120 and Mr. Radice's clerk had been a collectorate nazir—both had escaped "justice" from the Sessions Court. After a time young men came forward and after a course of training have done excellent work. In fact we have now scarcely a clerk whose age is more than 30. The mistakes made by copyists have got the Department into trouble more than once, both with the Commissioner and the Director. I am glad to say that some of our best clerks have already received appointments from Collectors and the names of others have been submitted in registers with suitable recommendations to the Collectors of the three districts.

375. The chapters on procedure which follow may appear somewhat dull, but a perusal of them will show that they must be of vital importance to our successors—the Settlement

Procedure.

Officers of 1927. It is impossible for me to criticise the action of my predecessors without putting myself out of sympathy with the readers of this report, but a very conscientious attempt to put together all the salient features of the procedure in the present operations has been made by Mr. Webster. He has succeeded so well in his task that I have practically to make no alterations. The chapters on *Khanapuri* and Attestation must be perused before my remarks will be readily intelligible.

376. In this introduction I would wish to say a few words on the position of revenue officers.

The position of Revenue Officers.

It appears to me, and I submit my opinion with the greatest deference, that at a future settlement the Commissioner should be the Director and Head of the operations, an Additional Commissioner being appointed to carry on his other work. In each district, too, the Collector should be the Settlement Officer and his Joint Magistrate should carry on his other work. I should not like to be mis-understood in what I have said or shall say in this matter.

The Settlement Department owes its gratitude to the Commissioners and Collectors in Orissa for the last ten years and acknowledges its obligations most gratefully, but nevertheless I am conscious that there has been delay and loss of time in acquisition of necessary information by the Department.

In the first instance it is my opinion that many difficulties would have been avoided if a senior officer had been appointed as Settlement Officer from the very beginning.

It is necessary to have one officer for the sake of uniformity, and it is necessary to have a senior officer for the sake of authority.

The next important point is that the officer in charge should be the head of the Province. All our work has of course been closely bound up with the Collectorate, but the Collector of Land Revenue could not help regarding the Revenue Settlement Department as one which threw an enormous amount of extra work on his shoulders.

Again, on the Magistrate's side, the Settlement Department has no authority and to the Magistrate (and Judge) the Settlement Department have indirectly caused more breach of the peace and litigation than any other set of causes combined during the last ten years. Nor is the end yet—rent suits and title suits and maintenance of possession by violence must continue for a year or two longer.

At the last Orissa settlement the charge of the operations in each District lay in the hands of the Collector and at their head was the Commissioner who was the controlling authority for the whole Province. Our work has of course been closely bound up with the Collectorate and the separation of the Department from his control has placed us at a disadvantage, and not only has there been waste of energy in acquisition of information, but possibly also a certain loss of information; again, the advantages of having the Commissioner at the head of the Provincial settlement are equally great. The traditions of the last settlement survive in full vigour, and the Commissioner's authority commands the highest respect in the Province.

While making the preceding observations on the advisability of placing the future settlement work in the charge of the local authorities, I should not be understood to overlook the value of the assistance obtainable from the Director of Land Records and Agriculture. His wide experience obtained in

supervision of the settlement work throughout the Provinces of Bengal, Bihar and Orissa adds a special value to his suggestions and supervision. The lessons learnt in one Province are materially useful in the organisation of the work in another, and uniformity of practice so far as the local conditions of each Province allows is indispensable to proper control. My own experience is that in many matters the practices in Bihar and Chittagong settlements were found useful in Orissa. I have elsewhere noticed how largely the present Orissa settlement is indebted to Messrs. Finucane, Macpherson and Lyon, who have been Directors of Land Records, and I venture to think that in the next settlement, too, the wide and special experience of the Director of the time may be utilized with advantage.

To sum up, I think that at the next settlement the work may with advantage be placed in charge of the Collector and of the Commissioner as the central controlling authority in the Province. This arrangement will secure smooth progress of work and will have generally important administrative advantages. Under this arrangement the work will have also the full benefit of the Collector's and Commissioner's local experience.

It is further necessary to retain the Director's connection with the settlement in order that the lessons furnished by the settlement work in other Provinces may be utilized and that important matters of principle and procedure may have the benefit of the Director's broad experience.

In conclusion, I venture again to hope that I have not said anything invidious, but it is certain that these questions will arise at a future settlement, and I feel bound to put my experience down on record because, as it appears to me, there has been some loss of efficiency by the arrangements made at the present settlement and because it has been impressed upon me more than once that while the Magistrate and Collector and his subordinates have the full confidence of the Uriya, Revenue Officers and their assistants are regarded as troublesome and less entitled to respect.

377. In this connection (the position of Revenue Officers) one special point in the chapter on *Khanapuri* procedure deserves mention. It seems to me absolutely necessary that all the officers of the Survey Department should be subordinate to the principal Settlement Officers. The Settlement Officers in the early days blamed the Survey Department for bad work, and the latter blamed the Settlement Department for want of instructions. From the field season of 1892 onward these recriminations ceased because the heads of the two Departments came to an understanding. Of what happened before October 1892 I can say very little, but from that date onward at least two Assistant Settlement Officers were deputed to each camp and were armed with full instructions to supervise the *Khanapuri* work. Even so, after the record writing was completed the records were returned to the Survey office for extraction of areas and compilation of statistics, and there was sometimes considerable delay. It will be remembered of course that in the last settlement of Orissa no field to field maps were prepared and beside the field books the Survey Department had only maps on the scale of 4 miles to the inch to work upon. For this reason the Department had to remain longer with us than it would otherwise have done. At a future settlement it may not be necessary to employ the Survey Department at all, but if it is necessary I would suggest that the officers of the Survey Department be placed directly in subordination to the Settlement Officer. I may add that in Khurda the revision of survey was carried out smoothly and expeditiously by such a procedure.

378. A great deal concerning the Tenancy Act will be found in the chapters which follow. Nearly all the work, i.e., all except the settlement of rents for some 60,000 tenants, was carried through under the old Act before the introduction of Act III. B.C. of 1898. It was anticipated that even "by keeping within the four corners of the Act," there would be great difficulty in settling rents according to the Civil Procedure Code for 17 lakhs of tenants. The rules however of 2nd November 1895 framed under Section 189 of the B. T. Act prescribed that in the first instance proposals of fair rents should be made, and if the proposals were accepted it was not necessary to go through the formalities of the Civil Procedure Code. After the first two or three months objections became

The relations of Survey and Settlement Officers.

The Tenancy Act.

extremely rare. As soon as raiyats understood that until the contrary was proved the existing rent was presumed to be fair and equitable, they ceased to object. *Bazyafidars*, at first encouraged to hope that as in the permanently-settled district of Midnapur the rents of *hazyafidars* were not enhanced their own rents would also be left alone, were disposed to object to the enhancements. When, however, their attention was called to their *pattas* on which the fact was recorded that the rents were settled up to 1274, i.e., 1867 (extended after the famine to 1304, i.e., 1897) and when they saw the Government orders of the last settlement limiting the fixation of their rents only to the term of settlement, and lastly after noticing that no attempt to level their rents up to raiyati rentals was made, they gave way and accepted enhancements grudgingly at first and afterwards with resignation.

The amended Act very much simplifies the procedure in areas under settlement of land revenue and places the subordinate officers at every stage under the control of the Settlement Officer or confirming authority. It is now necessary to draft, publish immediately after attestation, to frame a rent roll, publish it, hear objections, and submit it with the objections for confirmation to the higher authority (in the case of Orissa the Settlement Officer). After confirmation the roll is incorporated in the record and finally published. All disputes are settled summarily and may be appealed to the Settlement Officer. By this procedure expensive suits are avoided, but the work of the Settlement Officer (if he is the confirming authority) is very much increased, because in proceedings for settlement of land revenue the Special Judge does not exercise jurisdiction. No doubt if the Act had been introduced when we had 40 officers in the field, Government would have vested the covenanted Assistant Settlement Officers with the powers of a confirming authority. The Act not having been introduced till the end of 1898, the Settlement Officer had only to confirm some 200 villages' rolls and hear about 90 appeals. This does not of course include several objections to rents which had to be examined and disposed of. The general result of my experience is that it is impossible to prevent officers from showing zeal by excessive enhancements, and for that reason I should like to have seen the procedure for areas under settlement of revenue extended altogether, i.e., to applications in permanently-settled areas. It seems to be better for the higher revenue authority to interfere of his own motion in cases of hardship than that he should have to advise raiyats to go to the expense of an appeal before the Judge, for fear he (the superior Revenue Officer) should incur the charge of executive interference with judicial discretion.

379. The area from time to time under the charge of the Orissa Settlement Department has included areas other than the temporarily settled portions of the three Districts.

Area under Settlement operations. From 1896 onward the Khurda Government estate, an area of 883 square miles, has been settled at a cost of Rs. 1,32,000, the gross demand having been increased from Rs. 3,09,000 to Rs. 3,77,000.

The small *khandaiti jagir* of Jumna Jharpara, with area 2 $\frac{1}{2}$ square miles, was settled at a cost of Rs. 487, the ascertained rental of the estate being Rs. 448.

The *Satais Hazari* and the *Ekhrajat* estates belonging to the Puri temple with areas of 11.8 and 105.5 square miles respectively have been re-settled. In the case of the *Satais Hazari*, which was intermingled with the revenue-paying temporarily-settled area, Government paid for the preparation of the record of rights and the proprietor bore the cost of settlement of rents amounting to Rs. 680. The rents of 3,024 tenants were raised from Rs. 11,302 to Rs. 15,143.

In the case of the *Ekhrajat* estate the proprietor bore the whole cost of operations amounting to Rs. 29,500; the rents of 14,621 tenants was raised from Rs. 23,391 to Rs. 31,558. The new demand for all the tenants on the estate is now Rs. 37,469.

The Madhupur permanently-settled estate, having an area of 64.8 square miles with 14,700 tenants, was re-settled entirely at the cost of the Court of Wards. The demand was raised from Rs. 24,199 to Rs. 31,552, at a cost of Rs. 29,002.

In addition to this, the Bhubaneswar Endowments, with an area of 2,090 acres, have been re-settled. The demand of 305 tenants has been raised from Rs. 799 to Rs. 948 at a cost of Rs. 1,920, and the work is still unfinished.

The Uparbast Endowment, with an area of 371 acres, has been re-settled at the cost of the Committee amounting to Rs. 400, the demand having been raised to Rs. 297.

Other small revenue-free properties intermingled with the Government estate of Khurda have been resettled at a cost of Rs. 1,372, borne by Government, though Rs. 454 has been recovered from the proprietors in stamps.

In the two *khandaiti jagirs* of Khurda, Haldia and Malipara, with an area of 9,738 acres, and assets of Rs. 2,530, settlement has been effected at a cost of Rs. 2,130 to Government. Lastly in the permanently-settled areas of Darpan and Derabisi a survey was made at the expense of Government, and now at the cost of the proprietors a record of rights with a view to settlement of rents is being and has been made. These last operations have been handed over to the Collector of Cuttack for completion.

It will be seen from the above that in addition to the comparatively simple work in the temporarily-settled area a large number of complicated operations have occupied a portion of the time of the Department.

CHAPTER XV.

SURVEY AND DEMARCATION.

380. The first step towards the beginning of the survey was the demarcation of the village boundaries. This was done, by revenue officers under the orders of the

Demarcation.

Collectors of the districts, by erecting small bamboo sticks, with earthen mounds at their bases, at the trijunction and salient points of the village boundaries. The demarcation officer was supplied with lists of villages and issued a proclamation, under Section 5 of the Survey Act, V. B.C. of 1875, to the owners and occupiers of the lands about to be demarcated. Then he proceeded to the spot and marked on the ground the boundaries as pointed out by the villagers, sending lists of the villages and the boundary marks to the officer in charge of the survey.

When the work began, the villages demarcated were those shown in the last settlement papers, and in Puri and Cuttack the work was practically finished before the orders to demarcate the recognised local village came into force.

381. The traverse survey of the temporarily-settled estates of the Puri District began in 1889-90 under the supervision of

Traverse Survey.

Mr. Patterson, and in 1890-91 the work was in full swing. The party was divided into three sections. two under Mr. Ewing and Mr. Madras being engaged on cadastral work in Puri and Cuttack respectively, and the third on traverse only. In the following season the number of sections was increased to five, three for the cadastral and two for the traverse survey. In the first two seasons the unit of traverse survey was the settlement village as demarcated, but in 1891 it was decided to follow the revenue survey instead and ultimately, as a slavish adherence to the revenue survey was found impracticable, the existing village as pointed out by the villagers was made the unit. All traverse work was plotted roughly on the 4" scale and comparisons were made with the old 4" village maps of the former survey, and wherever any serious difference was found it was noted for the information of the Settlement Department. In practice such notes were rarely if ever made, and there is no trace of them in the records. Differences in area were generally detected and recorded at the attestation stage. All *tahsilalahida* blocks * over 50 acres in area were also traversed round but not plotted separately, i. e., they were plotted and surveyed with the village in which they lay.

In the earlier traverse these *tahsilalahida* lands were commonly plotted and mapped separately, but this error was in most cases subsequently rectified.

In Kokhuakhand and Tapankhand and other Parganas near Cuttack villages were found wholly lying within other villages. They have for settlement purposes been treated as separate villages, but they are all on one map and have generally been given a single number. In the Puri District some difficulty was caused by Khurda lands lying within Puri villages. These, though shown

* Vide Chapter XIII, paragraph 364.

on the map of the Puri villages, were for all settlement purposes treated as part of the Khurda village to which they belonged, and a separate record prepared.

382 The traverse supplied to the cadastral sections skeleton village maps on the scale generally of 16"-1 mile, showing the theodolite stations. With these skeleton maps as the basis of their work the *amins* mapped the village boundary and plotted in the fields on the "quadrilateral" system as laid down in Chapter 6, Part II. of the Survey and Settlement Manual of 1895.

383. The unit of survey was the *khet* or field, consisting of all the lands of one kind lying within a single boundary and belonging to the same cultivator, as opposed to the *kita* or *kiari*, the plot or portion of a field surrounded by a *hira* or dividing *bund*. The number of *kitas* in each *khet* was however counted and shown in the settlement records and in some maps the *hiras* are marked by dotted lines (in the revision areas and Khurda, also revised).

In the season of 1890-91 it was found that the average size of a *kita* in Cuttack was $\cdot 16$ of an acre or about $2\frac{1}{2}$ to the field, and in Puri about $1\frac{1}{2}$ to the field, so that if every *kita* had been separately mapped the number of plots, and therefore the size of our records, would have been about doubled.

384. With the exception of those of the revision survey area and of the large towns all maps were prepared on the scale of 16"=1 mile, but where, as often was the case, it was not found possible to show all the details of the village site on that scale, the houses and homesteads were taken out and shown in the margin of the map on the 32" or 64" scale.

385. Cuttack town was surveyed in 1894-95 on a scale of 64"=1 mile, the Cantonments only, which had been previously surveyed on a 12" scale, being omitted from the maps. Other large towns, such as Balasore, Bhadrak, Jajpur, Kondrapara, Chandbali, were surveyed on the 32" and occasionally on the 64" scale.

386. All trijunction points were marked with stones obtained at a cost of Rs. 56-4 per 100 delivered at any convenient centre. Smaller stones costing Rs. 37-8 per 100 were originally used to mark the satellite stations of each trijunction, but early in the season of 1891-92 orders were given that the smaller stones should be embedded at stations at intervals of about 10 chains, taking care that each stone was so placed that the stations in advance and behind it might be visible. Other stations were marked only by a little mound of earth with a small clay cylinder embedded.

387. An attempt was made to use *patwaris* and local *amins* for the cadastral survey and the writing of the record, but the progress made was very unsatisfactory. The Surveyor-General's report for 1890-91 shows that owing to the slow rate of progress made by the Uriya *amin*, and the consequent increased expenditure on cooly labour, the cost amounted to anna 1 pies 9 per acre against pies 9 in the case of a second class Hindustani *amin*. *Amins* were paid at the contract rate of Rs. 3 per 100 acres and only earned Rs. 3 to Rs. 4 per month; *patwaris* were paid nothing, so that the total cost per acre in their case came to anna 1 pies 3 for coolies.

In 1892 Lieut. Crichton, then in charge of the survey, wrote:—

"The Uriya will do no more work than he is absolutely obliged to do in order to obtain a bare living. It is only by the closest supervision and constant coercion that the Uriya *amin* can be prevailed upon to produce a moderate day's outturn of work. As a Surveyor his laziness makes him practically useless; his rate of work has been proved to be this season one-fifth that of an up-country *amin*. In Orissa no labour is given free by the villagers as in the case in the Upper Provinces. Each cooly has to be paid 1 anna or 2 annas a day according as he is working in his own village or outside it. As each *amin* requires about five coolys it is evident that cooly hire is a very expensive item in Orissa, more especially so when the Uriya is employed as a field surveyor. The Uriya *amin's* outturn being 6 acres a day and 5 or 6 annas being paid for coolys the cooly bill alone adds one anna per acre."

"In order to reduce the expenditure on detail survey, this branch of the work was gradually handed over to up-country *amins*, the Uriya being employed on *khanapuri* work."

388. In Cuttack, 364 square miles had been surveyed for the Irrigation Department on the 32" scale in 1878-79 and in

Revision Survey.

1892 the maps were revised and new records written. "The old survey was on the 32"=1 mile scale, and the original unit of survey was the *kita* (each *kita* having a number and its area extracted), and there was no distinction made on the map by which the "field" or occupancy of the cultivator *khet* could be recognised; nor had the houses in the villages been separated from the fields or compounds. The revision procedure adopted was to give the *khanapuri amin* the map, and he, while he did the *khanapuri*, ascertained which lines on the map, denoted the boundaries of a *khet* and which the *kitas*, the latter he scored across in red ink and then gave a number to the *khet*. On the traces the *kitas* have been, and on the fair maps will be, shown by dotted lines. In cases where the *khet* had not altered since the former survey, the area was obtained by the simple addition of the areas of the *kitas* contained in it, as given in area the statement of the former survey. Where there were differences,—and there were many owing to distributary canals having been cut and the other changes which must be expected in a period of 14 years,—areas had to be re-extracted.

The *amins* were paid Re. 1-8 per hundred acres, i.e., half of what was paid for fresh survey, and the work cost about Rs. 64-14-0 per square mile; exclusive of the cost of finally dressing the records, about Rs. 16 per square mile. This was a very considerable saving on the cost of original survey and *khanapuri*, which, including traverse and stone embedding, came to about Rs. 198 per square mile in the rest of Cuttack.

In 1893-94 the maps of the Temple (*Ekhrajat*) lands in Puri prepared in

Revision of Ekhrajat Survey. 1876 were revised. The cost was Rs. 7,126 for 105 square miles or Rs. 78 per square mile.

CHAPTER XVI.

KHANAPURI.

389. The detailed survey of a village or part of a village being complete,

Explanation of the term.

the next stage was the *khanapuri* or the filling up of the columns in the draft records. It was, as had been said before in treating of the cadastral survey, found advisable to entrust to up-country *amins* the actual mapping of the village, but the records were almost invariably written by an Uriya. As the up-country man worked faster than the Uriya it was found more economical to allow the map to be made first and to then hand it over to the Uriya *amin*, who, while filling up the records, corrected in red ink any mistakes that he found in it.

Forms.

390. The records to be filled up by the *khanapuri amin* consisted of:—

- (1) A field index or *khasra*.
- (2) A detailed record of each tenant's lands called a *khatian*.
- (3) An abstract record of the rights of proprietors and tenureholders known as a *khewat*.

Subsidiary forms to facilitate the check and correction of the draft records were also prescribed, viz., a *parcha* or abstract of the draft *khatian* to be given to the tenant, and a dispute list.

The forms finally determined on for the settlement, together with the rules for their preparation, will be found in Appendix B. Briefly their essential features are:—

The *khasra* is a list of the fields in the village arranged in the order of their serial numbers with the names of all owners and occupiers, the area, and a description of the land and crop entered against each.

The *khatian* is a list of tenants showing the fields held by each one, their area, the rent payable, and the status of the tenant and certain special incidents of the tenancy.

The *khewat* shows for each property for which it is prepared the names of the owners, and the character and extent of their interest.

The further details shown in these records depend on local considerations, but so much as is stated here is essential,

391. Work began in 1890-91 in the Parganas of Rahang, Serai and Chaubiskud in the District of Puri.

Commencement of work.

Mr. A. K. Ray was Settlement Officer from December 1889 to December 1890, but does not appear to have issued any instructions for the guidance of the Survey Department, who had to work on the lines laid down in the Survey Manual supplemented by rules drawn up by Mr. Ewing who was in charge of the cadastral party.

392. With Mr. Reily's appointment as Settlement Officer the system was changed; to each survey camp were attached one or more Assistant Settlement Officers whose business

Rules of 1891.

was to supervise and check the *khanapuri* while it was in progress and to attest the records on their receipt from the Survey Department. Detailed rules for the guidance of the Assistant Settlement Officer of Tangi Circle were drafted by Mr. Reily in April 1891 and were criticised by the Director of Land Records and by the Commissioner. The main points insisted on were:—

- (a) The issue to the occupiers of the land of *jamabandi* slips or *parchas* i.e., extracts from the records giving the number of each field and its boundaries, the class of soil and crop.
- (b) The actual check on the ground of a certain proportion of entries in the *khusra* by the Assistant Settlement Officer and the reporting of all serious errors to the officer in charge of the survey camp.

393. There continued, however, to be a considerable diversity of practice, and towards the end of the year 1891 fresh rules

Rules of 1891-92.

were drawn up by Mr. Reily dealing with the procedure for the settlement of boundary disputes and the preparation of draft *khewats*; but no complete instructions for the writing up of the records were issued until Mr. Finucane, the Director of Land Records, visited Orissa in March 1892; and the Uriya translation of the rules then agreed upon was not placed in the hands of the Survey Department until the 1st June of that year. Most of these rules were taken from the instructions drawn up by Mr. Lyon (then an Assistant Settlement Officer in Orissa) for the benefit of the survey camp under Mr. A. W. Smart at Jajpur.

The *khanapuri* of the Puri District was completed by the survey party under Mr. Ewing by the 1st May 1892, and he then moved into the Cuttack District, where two parties under Messrs. S. O. Madras and A. W. Smart were already working.

By the 30th September 1892 the *khanapuri* of the whole of the temporarily-settled area in Puri, excluding Khurda 371 square miles, had been finished; and in Cuttack, the records of 1,443 square miles or nearly two-thirds of the area under Settlement had been written. The balance of work remaining consisted of 831 square miles in Cuttack, 105 square miles of Puri Temple Lands in District Puri, and the whole of the Balasore District.

394. For the area in which *khanapuri* work had not been done, revised rules were drawn up at a conference of Orissa

Rules 1892-95.

Settlement and Survey Officers, and these after approval in November 1892 by Mr. Macpherson, the Director of the Department of Land Records, and by Lieutenant-Colonel Sandeman, the Director of Bengal Surveys, were at length, in March 1893, printed in their final form. The survey officers worked on them from the beginning of the field season of 1892-93, and with but few alterations they remained in force until the completion of the record writing in Orissa. They are to be found in their final form in Appendix B, Part II. to this report.

395. From this brief account it will be seen that the record-writing in the

Want of rules in early stages of *khanapuri*.

District of Puri was done by the Survey Department without much assistance from the Settlement Officers other than that of such supervision and advice as the Circle Officers, who had at that time little or no experience, could give them. More than half of the Cuttack District was completed in similar circumstances, and it is not surprising that the Survey Department complained of the difficulties of the work. I quote here the list of difficulties mentioned by Colonel Sandeman in his report on Bengal Surveys in the year 1891-92.

Difficulties in Khanapuri.—"The difficulties in *khanapuri* have been very great during this season :—

"*Firstly.*—The slow rate of work of the Uriya.

Secondly.—The number of changes in procedure during the field season. No less than four different forms of *Bhowriah* (*khassra*) and three different forms of *Wurijah* (*khatian*) were successively brought into use during the field season.

Thirdly.—Although the Settlement Department at the commencement of the season were supervising the *khanapuri*, no distinct instructions were received as to the filling up of the records until Mr. Finucane, the Director of Land Records, visited Orissa, when on the 26th March 1892 a *Hidyatnama* was published; but it was not till the 1st June 1892 that Uriya translations of these instructions, although repeatedly called for, were received from the Settlement Department.

Fourthly.—Almost throughout the entire area *khanapuried* no draft *khewats* had been prepared by the Settlement Department; they had therefore to be prepared by the Survey Department and compared with the A, B and C Registers of the Collectorate. In some parganas draft *khewats* had been prepared *mahalsar*, but these were practically useless as they had to be converted into *mausawar*. In addition to this, there was great delay in the supply of the *khewat* forms; some Parts (I. and III.) were not received till 8th and 12th August 1892.

Fifthly.—With some exceptions the *khanapuri* officers supplied by the settlement to aid in the supervision of *khanapuri* and settlement of disputes were quite inexperienced, and had to be taught their duties. Until they had learnt their work they did not help greatly.

Lastly.—The establishment of *khanapuri amins* necessary for the large area expected could not be obtained.

396. Naturally the errors in the *khanapuri* were numerous, and the early correspondence abounds in complaints of the inaccuracy of the records.

Errors in *khanapuri*.

In October 1891 Mr. Sen in the Tangi, and Mr. Walsh in the Serai and Chaubiskud Circle, reported that they found so many mistakes that their *muharrirs* had to go over the whole ground again field by field.

Mr. Reily compiled a list of these in four circles and found that in a total of 62,643 fields, 21,334 mistakes had been found, or 1 in every three plots.

In the recess of 1892 Mr. Walsh reported that the number of corrections made in the records of his circle exceeded the total number of fields, while apart from the subdivision of *khatians* the proportion of mistakes found in the *khassra* to the total number of fields entered was in the recess of 1892 reported to be—

	Per cent.		Per cent.
In Kotdes	... 16*	In Tangi	... 90
In Rahang	... 40 35	In Kotrahang	... 30

It does not appear, however, that the *khassras* were really so defective as might be inferred from these figures. From the details of the list of mistakes compiled in 1891 it was found that of the total number of corrections about 10 per cent. were in the area columns, 2 per cent. in boundaries, 8 per cent. in the numbering of fields, 30 in the names of occupants, 7 per cent. in the demarcation of *tahsilalahidas*, 19 per cent. in the class of soil, 18 per cent. in entry of names in the wrong column, and 6 per cent. in the entry of last settlement field numbers.

The class of soil is at best a debatable matter, and the only serious mistakes would be those in the wrong entry of names, wrong areas, wrong numbering, and in the demarcation of *tahsilalahidas*; say, half the total.

397. Much of the *khanapuri* procedure is so closely connected with attestation that it will be simpler to consider the points raised when dealing with the latter subject, and I

propose in this chapter to deal only with :—

- (a) The relations of *Khanapuri* and Survey Officers.
- (b) The entry of areas in the field.
- (c) Requisition of rent-rolls from proprietors.
- (d) Distribution of *parchas*.
- (e) Entry of status by *amins*.
- (f) Entry of rent at *khanapuri*.
- (g) Employment of *kanungos*, *patawaris* and *chaukidars*.
- (h) Identification of last settlement fields.
- (i) Treatment of disputed entries.

* Does not include mistakes in soil classification.

- (j) Boundary disputes.
- (k) Unit of survey (i.e., under survey).
- (l) Preparation of draft *khawats*.
- (m) Progress and out-turn.

398. The Settlement Officer and Deputy Superintendent of Survey exercised joint control over all establishments utilised for survey and *khanapuri* simultaneously. They corresponded directly with one another, and when they could not come to a compromise in any matter of principle referred it for decision respectively to the Directors of Land Records and of Survey. The Assistant Superintendent of Survey, or camp officer, had the immediate control of the whole establishment entertained for survey and *khanapuri*, and was entirely responsible for the accuracy of the survey. The business of the *khanapuri* officer was, with the help of his inspectors, to check the correct writing up of the records and to dispose of all disputes. He had the powers of an Assistant Superintendent of Survey as well as of a revenue officer under the Bengal Tenancy Act, but had no power to punish or dismiss any of the survey establishment except through the camp officer.

399. During the early part of the work the *amin* doing *khanapuri* left the column for area blank and areas were extracted and *khatians* prepared in the camp after receipt of the records from the *amin*.

This system had the double disadvantage of leaving the raiyat without any idea of the area entered in his name up to the time of attestation and of overburdening the Survey Department with work to be done in recess. For the season of 1891-92 Colonel Sandeman adopted the new procedure† of having *khatians* prepared day by day and extracting areas by skilled computers in the field immediately on the completion of the *khanapuri*.

This system was continued to the end of the work and is thus described in a note of the 4th March 1893 by Messrs. Sandeman and Macpherson:—

An Uriya *amin* will do the *khanapuri*, also correcting the foreign *amin's* map in red whenever the rights in the land are incorrectly shown. When available, a second Uriya *amin* will write the *khatian* and *parchan* while the first writes the *khassra*, entry for entry, the object of employing two men being to check corruption and hasten preparation of the records for final attestation. The *khanapuri amins* will also fill in the *lakhiraj bahul*, *minha jagir* and *nij-jot* statements as laid down in the rules following.

The *khanapuri* of the records being thus finished the areas will simultaneously be extracted and entered in them all. The *khassras*, *khatians*, and the statements mentioned in rule 8 accompanied by a trace of the map, or when delay would be caused by the preparation of a trace by the original sheet, will then be despatched to the circle officer for final attestation. The areas will be entered in the *parchas* if brought by the tenants, to the circle or sub-circle office at the beginning of the attestation proceedings.

Foreign inspectors will check the survey.

Uriya inspectors will check the *khanapuri* unless the Settlement Officer will accept the best of the foreigners aided by Uriya *muharrirs*.

When the records are finally received back in the Survey Office after attestation, they will be completed and statistics extracted.

400. Before the *amins* took the field the proprietors and tenure-holders were served with notices requiring them to file rent-rolls for the villages under survey.

These notices were at first served by peons, but it was afterwards decided to use the agency of the post office, and the notices were sent in registered covers, the postal receipt being taken as evidence of delivery. The form of these rent-rolls locally known as *ekpadia* varied considerably from simple lists of tenants with the area held and the rent payable by each to elaborate statements of demand and collection arranged status by status and raiyat by raiyat. Strictly speaking the production of existing documents only could be enforced, but as nearly all zamindari accounts in Orissa are kept on palm-leaves which were very bulky and inconvenient to handle it was the practice to demand extracts in some fixed form.

This procedure necessarily left room for misrepresentation and collusion, but it is very doubtful whether the proprietors could have been induced

* See Appendix B.

† Letter No. 732, dated 26th December 1891, from Colonel Sandeman to the Settlement Officer.

to give up their original papers while they could generally be made to bring them at the time of attestation when so required.

The *amin* when going to the village took with him these *ekpadia* papers which formed the basis of his *khatians*, no deviation from the names given therein being allowed except with the consent of both landlord and tenant, or on the orders of the *khanapuri* officer.*

401. *Parchas* showing the name of tenant and numbers of field were prepared in the season of 1891 by the Survey Department and issued to the tenants, except in the Rahang, Serai and Chaubiskud Circles. Mr. Reily considered the information given to be insufficient and prescribed a counterfoil *jamabandi* slip showing the class of holding, the boundaries of the field, the nature of the crop grown, the area, and the rent as stated by the landlord and by the tenant.

Before commencing *khanapuri* in 1891 the *amin* gave to each tenant a *parcha* foil taking a receipt on the counterfoil, and entering on both the tenant's name. As *khanapuri* proceeded he entered each field in the counterfoil and in the *parcha* produced by the tenant. When the next field was found the tenant produced his *parcha* to have the field shown on it. At this stage the column for area was left blank to be filled up at attestation.†

In the season of 1892-93, arrangements having been completed for the extraction of areas in the field, an attempt was made to collect the *parchas* before the *amin* left the village in order that the areas might be entered in the camp office and the *parchas* returned to the tenants in time to allow of their verification before the final attestation of the village. This plan was not, however, successful and was abandoned before the end of the season. The collection of *parchas* created a panic in the minds of the raiyats and the re-distribution was accompanied by great corruption.

Down to the end of the season of 1893, i.e., during the whole time of *khanapuri* in the Cuttack and Puri Districts, the *amin* was required to obtain the signature of both landlord and tenant to the *parcha*, and if he could not do so, entered the holding in the dispute list for the orders of the Assistant Settlement Officer.

During the season of 1892-93 the columns for rent and status were filled up by the *amin*; in 1893-94 they were filled up by the *khanapuri* inspectors; and from 1894 onwards were left blank to be filled up at attestation.

402. It has always been held that the entry of the status of a tenant cannot safely be left to an *amin*, but must be personally attested by a revenue officer in the case of every raiyat, and rule 15 of the Rules of 4th March 1892 runs thus: "The survey *amins* will in no case enter the status or length of occupancy of raiyats."

In the next season it was proposed that the preliminary attestation of the record and the *khanapuri* should be combined into one process, and the *amin* was required to enter both the status and length of occupancy of each tenant. In the rules for 1893-94 however it was provided that all entries of status should be made by the *khanapuri* inspectors. This rule was withdrawn in March 1894 and the only entry of status made at the *khanapuri* was in the remarks column of the *khasra*.‡

The reason that appears to have influenced Government in arriving at this decision was the fear that tenants would not rightly appreciate the importance of the correct entry of status, and might not perhaps understand the meaning of the entries made. During the recess of 1893 Mr. Maude took very great pains to draw up the rules in as complete a manner as possible. I wrote to him as follows:—

"As regards status I cannot see any necessity for an entry by the *amin* as to a raiyat's status for every field recorded in his name. The Assistant Settlement Officer has each raiyat up before him at attestation in the presence of the zamindars or his agent and in the presence of his fellow raiyats with all his proofs. A few questions will elicit his status and the Assistant Settlement Officer can record it with his own hand once for all in the *khatian*."

* See Appendix B. II., Rule 16.

† See Appendix B. III., Chap. 4, Rule 3

‡ See also para. 429.

On the other hand it was impossible, without a previous entry of status, to prepare separate *khatians* for the lands held by a tenant under different titles, and in fact Mr. Finucane's rules of March 1892 appear to have contemplated the inclusion of lands of all descriptions in the occupation of a single tenant, even of those held under different landlords, in one *khatian*. The *khatians* so prepared represented no *holding* and were incomprehensible alike to landlord and tenant. There can be but little doubt now that by far the best plan would, where the *amins* could not be trusted to enter status correctly, have been to have left the preparation of *khatians* to be made in an attestation camp.

403. In the season of 1891-92, *amins* were absolutely forbidden to make any entry of rent, the revenue officer being required to ascertain and enter the rent himself. For convenience, however, this order was commonly disregarded, and by the rules for 1892-93 *amins* were required to enter in the *khatian* and *parcha* the rents stated by landlords and by tenant, and to note in the *kharsa* the rate of rent if known.

In 1893 the whole question of the entry of rent and status in the field received the special consideration of Government in connection with the Bihar survey, and a long succession of changes were made in the rules.

In August 1893 I gave my opinion that—

"The record of rates of rent in *kharsa* and rentals in *khatians* by the *amins* have been useless for the Assistant Settlement Officer's purpose. Such entries are made by the *amin* in collusion with raiyats and zamindars and have been a fruitful source of illicit gains. It has been my experience that zamindars often put one rate of rent of the *kharsa* which if multiplied by the *ekpada* area would give a different rental from what is stated in the *ekpada*, and again a different one from that entered in the *khatian* and different from that ascertained at attestation by the Assistant Settlement Officer."

Mr. Radice in a note of the 18th August writes: "As to entering rents I would decidedly prefer that they be not entered at all in the *khatian*. The raiyat's ideas of the rent he pays are generally so vague and inaccurate that it is all but useless to record them except at attestation by the attesting officer himself. The rent according to the landlord can best be recorded by insisting on *ekpada* papers being filed before the commencement of field operations."

Orders were accordingly passed by Government that all entries of rent should be made by the *khanapuri* inspectors and not by *amins* and these orders were embodied in the Orissa rules. Mr. Maude wrote on this, in his letter No. 2112 of 25th September 1893 to the Director of the Department of Land Records and Agriculture:—

"You will observe that I have accepted in full the alteration made by the Government rules as to entry of rents by inspectors only, and as to the postponement of all entries of raiyati status until the time of alteration when this function will be performed under the Revenue Officer's own eye. The question whether inspectors can enter rentals with their own hand without the necessity of their staff being so increased as to materially augment the cost of survey is one which the Survey Department will be most fitted to discuss. My own belief is that unless the staff of inspectors be doubled, they can only carry out the order at the expense of their ordinary inspection duties, on the faithful performance of which it will be seen from the rules drafted for the supervision of *khanapuri* that we must chiefly rely in aiming at a correct preliminary record."

In letter No. 1161 T.R. of 22nd September 1893 from the Government of Bengal to the Secretary to the Government of India it was laid down that rents and status should, at the *khanapuri* stage, be entered on the *parchas* only by inspectors, and in Government order No. 509 L.R. of the 26th January 1894 the following procedure was enjoined:—

"The rent will be entered by the inspectors after enquiry in the village, and with his own hand, on lists showing (i) names of tenants and landlords, (ii) rent as stated by landlord, and (iii) rent as stated by tenant. The inspector will file these lists with the Settlement Officer or the Assistant Settlement Officer under whose orders he is placed after the entries have been copied into the headings of the *parchas*. The *amin* will fill up the columns of the *kharsa* and those in the body of the *parcha* as the work proceeds, field by field, noting in the *kharsa* against the first field where each tenant's name appears the rent entered in the heading of the *parcha*. If the *amin* discovers, during the progress of his work, any discrepancies between the rent entries in the inspector's lists, and actual facts as stated by the parties to him, he will enter what he finds to be the facts in the *kharsa* and in the body of the *parcha* in red ink, and will note such discrepancies, in a separate paper, for the orders of the inspector or of the Assistant Settlement Officer.

"When either of these officers has passed orders on the discrepancies, the correction (if any) will be made in the headings of the *paroha*, if the inspector's first figure is wrong; in the columns of the *khassra* and of the body of the *paroha* if the *amin*'s figure is wrong."

This rule did not come into force in Balasore until March 1894 and only a fourth of the villages of which the records were written during the season were done on this system. Mr. Maude, reporting on the working of the rules in August 1894, wrote:—

'In my opinion the *liass* are of practically no value and are not worth the expense of any extra *munserims*. As pointed out in my letter No. 701, dated the 2nd March 1894, to your address, the rule must interfere with the *khanapuri* work and the provision of the inspectors unless special or extra men are appointed; and the appointment of special or extra men means descending to a lower class of inspectors. Every rental has to be gone into again at attestation, and it would be better and cheaper to leave the entries to be made entirely at that time."

The rule was in October 1894 set aside by the orders of the Government of India, who, in their letter No. $\frac{9728}{43}$ of the 16th October 1894, wrote:—

"Entry of status and rent at attestation is the old-established practice in Bengal. It appears to have been followed with complete success in Bihar in 1887; and experience has shown that it involves no material additional expenditure either of time or of money. The Board of Revenue, whose advice in a matter peculiarly within their functions must carry great weight, have expressed a decided preference for the continuance of this practice, and in those circumstances the Government of India trust that His Honour the Lieutenant-Governor will agree with them in thinking that its continuance is essential in order to safeguard the accuracy of the entries of rent and status

"For these reasons the Government of India desires that, as the system of entry by the Inspector is not regarded as satisfactory by His Honour the Lieutenant-Governor, the old rule of entry by the Revenue Officer at attestation should be followed, the columns being left blank at *khanapuri*."

The result was that the preliminary entries have since then been made by the *muharir* in the attestation camp and not by the *amin* in the field.

404. The *patwari* in Orissa still exists only in a few estates. He is the

Employment of *kanungos*,
patwaris and *chaukidars* on
survey and settlement.

Mahomedan counterpart of the village accountant (*bhoi*) of the early Hindu village. He was responsible for the collection of the revenue of the village to the divisional accountant or *Bhoimul*,

the *kanungo* of the Mahomedan system. Under British rule his duties and powers were defined by Regulation XII of 1817 and have been further described in the Revenue Officer's Manual. In the settlement of 1838 many *patwari jagirs* were resumed and it is only in the larger *taluks* that *patwaris* are now found.* Altogether there are in Cuttack 100, in Puri 321, in Balasore 56. The *kanungos* play a far more important part in the district administration of Orissa than the *patwaris*. There are altogether 45 in the Province, viz., in Cuttack 25, in Balasore 12, and in Puri 8, besides three chief, or *sadar kanungos*. Each *kanungo* has a circle or *chakla*, comprising two or more Parganas, and within this area he collects rents from the tenants of Government and cesses from petty proprietors, maintains a record of proprietary rights, reports on all local calamities, fluctuations of prices of food grains, and other matters connected with the local revenue administration, and makes such local enquiries as are ordered by the Collector of the District.

Proposals for utilising the services of *kanungos* and *patwaris* in the Orissa survey and subsequently for the maintenance of the land records were made by Mr. Finucane in 1888 and were accepted by the Board of Revenue in their letter No. 973A. of the 17th December 1889.

The Government of Bengal in a letter No. 270, dated 22nd January 1890, expressed entire approval of the scheme and urged that every effort should be made to overcome any difficulties that might be encountered. Survey schools for the training of *kanungos*, *patwaris* and village headmen, were started in Cuttack, Puri and Balasore under the control of Mr. Patterson, the Deputy Superintendent of Survey, and 328 *patwaris* obtained certificates.

Orders were passed by Government in their letter No. 339L.R., of the 16th March 1891, approving of the proposal of the Board to place all *patwaris*, *kanungos*, and *chaukidars* under the control of the Settlement Officer, who for

his purpose was vested with the powers of a Collector under Regulation XII. of 1817.

The *kanungos* in the Puri District were accordingly placed at the disposal of the Settlement Department and relieved of their ordinary revenue duties. They continued however to be paid from the general administration funds, and it was stipulated that they should carry out any written orders sent them by the Collector of the district.

In Cuttack the Collector expressed his inability to give up the *kanungos* until he should be provided with substitutes, and in their letter No. 397 T.R., dated 21st September 1891, the Government of Bengal sanctioned the appointment of a special establishment to perform the ordinary duties of *kanungos* while the latter were on deputation with the Settlement Department.

In accordance with these orders 25 out of the 26 *kanungos* of Cuttack and all the 13 *kanungos* of the Balasore District were placed absolutely at the disposal of the Settlement Officer and received their pay from the Settlement budget.

The *sadar kanungos* were employed at the headquarters, and their acquaintance with the records of the old settlement enabled them to render services of great value.

The other *kanungos* were employed partly at the headquarters in supervising the preparation of draft *khowats* and comparative statements, and partly under the Assistant Settlement Officers in the field. Their work was not found satisfactory, and in October 1892 Mr. Walsh wrote:—

"On the whole, however, I am strongly of opinion that their agency has not been nearly so effective as an agency of specially appointed *muharrirs* or *munsierms* appointed by the Settlement Department, and I would strongly recommend that their services be returned to the regular line, and in their place the amount of their salary be placed to the credit of the Settlement budget for the appointment of special *munsierms* to discharge the duties on which the deputed *kanungos* are now employed or which may be allotted to them. The expense is Rs. 13,200 per annum. This amount, if credited to the Settlement budget, would procure a far more efficient agency for the purpose, and the services of these officers might be returned to the Collectorate."

In November 1892 the Collector of Cuttack raised objections to the employment of *kanungos* otherwise than on field work within their own circles. The adoption of his views still further limited the usefulness of the *kanungos*, and in a letter No. 1665, dated the 8th July 1893, Mr. Maude wrote as follows to the Commissioner of the Division:—

"Not only is the Settlement Officer unable to get full value for the money spent in maintaining the *kanungos*, but such work as they can be put to is given grudgingly and under constant compulsion, and with the idea that they are not in reality responsible to the Settlement Officers. I should be unwilling however to lose their services altogether, as some of them do really useful work when in the *mufasal*, where they have of course the great advantage of local knowledge. Both Mr. Nathan and Mr. Radice and the other Balasore officers have *kanungos* working under them at the present time and they are doing work in these districts. In these circumstances I would strongly advocate that, if practicable, the system prevailing in Puri may be extended to Cuttack and Balasore, that is to say that the services of the *kanungos* may be again made over to the Collectors and the acting men abolished, but that they may receive orders to work under and assist the Assistant Settlement Officers whenever work is actually going on in their *chaklas*. By this means a great saving will be effected to the settlement budget, the duality of control will be done away with and the Assistant Settlement Officers will, at the same time, secure the service when required of such *kanungos* as are able and willing to help them. The system has worked so far in Puri and I see no reason why, if the Collectorate and Settlement Officers are in harmony, it should not work equally well in the other two districts.

If however this is considered to be impracticable I would recommend that the *kanungos* be handed over again to the Collectorate and the money now spent by the settlement on their maintenance be devoted to such substitutes as may be necessary. We should then at least have an establishment by the reduction of which we could economise when the full number is not required, and out of which we could exact strict obedience and a full tale of work, considerations which I consider far outweigh the local knowledge possessed by some of the *kanungos*."

These opinions were accepted by the Commissioner and the Director, and in a letter No. 1532A. of the 11th November 1893 the Board of Revenue ordered that the *kanungos* should revert to general duty, but that when settlement work was going on in his *chakla* a *kanungo* should lend such assistance as might be required of him. All the *kanungos* were allowed to revert at once

except 1 in Cuttack, 2 in Puri and 9 in Balasore. Six of those in Balasore were retained till the end of the work and with one exception did extremely good work.

I found them thoroughly trustworthy. They possess a complete knowledge of the last settlement records and a great deal of local knowledge. The work done by Baistabunand Mahapatra and Hari Misir deserves special recognition. The former supervised copying and classification of some 2,000 records, and the latter did exceptionally good work in several assessment camps.

405. The employment of *patwaris* appears to have been even less successful than that of the *kanungos*.

Patwaris.

In June 1891 Mr. Reily wrote:—

"The *patwaris* I have seen at work are only turning out three to three and a half acres a day, that is, about 100 acres a month. It is true that we are getting the *patwaris*" services free, but we are paying the chainmen, and if the *patwari* only turns out 100 acres a month, the chainmen are costing us an additional Rs. 12-8-0 for every 100 acres. It follows that every 100 acres surveyed by a *patwari* is costing the State Rs. 12-8-0. A paid *amin*, however, can do 10 acres a day or 300 acres a month, and for this he is paid Rs. 3 per 100 acres. To the Rs. 3 per 100 acres will have to be added the Rs. 3-12-0 for chainman per 100 acres. Therefore, the paid *amin* who can do 10 acres a day though he is paid Rs. 3 per 100 acres, costs the State only Rs. 6-12-0 per 100 acres, while the 100 acres done by unpaid *patwari* is costing the State Rs. 12-8-0 per 100 acres. It would seem therefore to be far cheaper to employ paid labour than utilise the incompetent free labour of the *patwaris*."

Their work does not appear to have improved much as time went on, for in the annual report for 1891-92 Mr. Walsh wrote:—

"The reports given by circle officers regarding their work are very unsatisfactory. On account of the difficulty of obtaining control over them or enforcing orders to procure their attendance the *patwaris* have been of comparatively little assistance in either Puri or Cuttack."

Meanwhile in Balasore the *patwaris* proved even more intractable. In spite of the establishment of Survey Schools at Bhadrak and Balasore, they would not attend, and up to the end of August 1893 only six out of 56 were reported to be duly qualified in survey.

Only two were employed in the *khanapuri* in 1892-93, while five put in an appearance for a few days in the recess of 1893: 16 were employed on attestation, but appear to have attended very badly.

The attempt to use the *patwaris* was indeed an utter failure and was quietly dropped. They were too well off and had too long enjoyed a practical independence to willingly accept the hard work and rigid routine of an *amin*'s life, and Government wisely abandoned the attempt to exact its quota of service and contented itself with making the *patwari* pay rent for his land as will be described hereafter.

406. The services of the village watchmen or *chaukidars* were requisitioned for the purpose of summoning tenants and

Utilisation of *chaukidars*.

dragging chains, &c. They received no pay while in their own villages, but if taken outside them were given a subsistence allowance.

Difficulties cropped up at the very outset. In May 1891 Babu Chakulal Sirkar, the *khanapuri* officer of Tangi circle reported that most of the *chaukidars*' beats extended over more than one village and that they were expected to attend at one and the same time on more than one *amin*; that the local police had persuaded the *chaukidars* that they were not bound to obey the orders of the Settlement Officers, and that the *amins* themselves were disinclined to use the *chaukidars* as chainmen, lest by so doing they should be debarred from making their expected profit, while the *tindals* objected to pulling chains with men of such low caste.

Again in June, 1891, Mr. Reily wrote:—

"The services of these *chaukidars* have been utilised on the strength of orders, or rather a wish expressed by His Honour at the conference held at Cuttack in January last. I think it would be well if His Honour would express in writing his desire that the services of *chaukidars* should be used in survey work. There is no doubt that very great difficulties are placed in my way. The police are very much opposed to it, and it is but natural that they should be, as they are deprived of the services of the *chaukidars*. The Survey Department are opposed to it. The *amins* dislike it, as these *chaukidars* are mostly low caste

men, whom these *amins* pretend they cannot touch. The *chaukidars* themselves are opposed to it."

In August 1891 a circular letter was issued by the Deputy Inspector-General of Police desiring the District Superintendents to issue positive orders to all their subordinates that the *chaukidars* should serve as chainmen or render any other assistance in the survey work when called upon by the Settlement Officer.

At this time *chaukidars* were made to serve outside their villages, though never at a distance of more than three miles; but in 1893 orders were passed by the Magistrate of Cuttack that they were on no account to be employed outside their own villages.

In spite of this restriction and the positive orders issued from headquarters the difficulties appear to have subsisted to the last, for in May, 1893 Mr. Maude wrote to the Magistrate of Balasore complaining that "the Police of that district refuse to assist when required in the serving of processes or warrants."

Khanapuri being over, comparatively little assistance was required from the *chaukidars*, and in the stages of attestation and settlement of fair rents they have usually done willingly enough the little that was expected of them in the way of summoning tenants, or helping to re-measure with the *padika*—one of their customary duties.

Besides these three classes of *kanungos*, *patwaris* and *chaukidars*, it appears to have been thought that the village headmen (*muquddams*) and the *sarbarahkars* could be compelled to assist in the survey, and they were called upon to qualify themselves in the training schools; but when it was found that they possessed quasi-proprietary rights the proposal was abandoned.

407. The form of *khasra* first in use contained a column for the old *bhauria* number, i.e., for the number assigned to the plot in the *bhauria* or field book prepared in the last settlement. It was not however an easy task to identify the present survey with the last settlement fields. The *amins* had not got the old *bhaurias* and were dependent on the zamindars and tenants for their information, and the latter very often did not know the numbers. Even if a copy of the *bhauria* was produced the process of relaying it was tedious and difficult, all measurements having to be referred back to some landmark that could be identified even after 50 years. The result was that in August 1891 there were complaints from Assistant Settlement Officers that the old numbers had not been entered and that the attempts made to write up numbers in the survey office had not been successful.

It was decided that the numbers should be entered at attestation by the settlement *muhammadis*, but, during his visit to Orissa in February 1892, the Director ruled that the identification of the last settlement survey number was unnecessary, and in 1892-93 the column for old *bhauria* number was omitted from the *khasra* . Had it been possible to get an accurate record of the *bhauria* numbers they would certainly have been of the greatest use in the identification of revenue-free and privileged lands, but the expense of the identification would have been absolutely prohibitive. The *bhauria* has been used a good deal in the settlement of boundary disputes and other claims, the expense being paid by the disputants, and in a few villages almost the whole of the *khanapuri* has been revised after the identification of the last settlement fields.

One very large village in Cuttack, Nagpur, containing about 7,000 fields, was attested in this way at a cost of Rs. 140 paid by the proprietors, and all parties appear to have been thoroughly satisfied.

408. The general principle followed has been to give the *amin* no power whatever of deciding disputes, it being certain that most of them would use such power to extort gratifications from the villagers.

At first the *amins* were required to leave blank every disputed entry, entering the substance of the dispute on the dispute list for the orders of the revenue officer and encircling the blank space with a red line.

It was however found to be impossible for a revenue officer to deal with all disputes while the *khanapuri* was going on, and in the season of 1892-93 the rule was for the *amin* to make the entry that appeared to him correct, encircling it with a red line and recording the substance of the dispute in the

dispute list. This was again modified in the case of entries in column 7 of the *khassra*—name of raiyats and under-raiyats—the entry being left blank by the *amin* and subsequently made in accordance with the orders of the inspector. This is the procedure laid down in the final edition of the rules*.

The *khanapuri* officer when visiting a village was expected to decide all pending disputes, to check and revise the inspector's orders, and in addition to this to examine the records and check a few entries. With 100 to 500 *amins* or more in the field it was obviously impossible for him to cope properly with the work, and except in Balasore when there was a very strong staff who enjoyed the benefits of the experience gained in Puri and Cuttack, the decisions were at best extremely summary and formed little more than a basis for the drafting of the record.

409. The determination of village boundaries is governed by Rule 4, Chapter VI of the Rules under the Bengal Tenancy Act, which runs as follows:—

Boundary disputes.

"4. (a) In the demarcation of village boundaries care shall be taken to preserve, as far as possible, for the unit of survey and record, the area contained within the exterior boundaries of the village maps of the revenue survey.

(b) Where there is no dispute the boundary of the village according to possession should be followed, and where that boundary does not differ substantially from the boundary of the revenue survey, the latter need not be separately shown in the map.

(c) Where there is considerable difference between the boundary according to the revenue survey map and the existing boundary of the village as ascertained by the Revenue Officer, the latter should be followed for the purposes of map and record; but the boundary of the revenue survey map should also be marked on the new village map.

(d) Where there is a dispute as to village boundaries, the Revenue Officer shall decide the dispute under the Bengal Survey Act V (B.C.) of 1875."

The rules drawn up by Mr. Reily for the guidance of *khanapuri* officers in 1891-92 provided that the Survey Department should send to the circle officer lists of all boundary disputes with dispute traces.

That the circle officer should arrange these disputes in local groups, complete the traces, and depute a *kanungo* to the spot to enquire and settle the dispute if possible.

That in all cases where the area in dispute was over 50 acres, or where the *kanungo* failed to arrive at a settlement, the circle officer should himself proceed to the spot and decide the case after local enquiry and record of evidence.

A good deal was however left to the discretion of the circle officer and the procedure varied considerably.

If at the *khanapuri* stage no decision had been arrived at, a separate set of numbers were given to the fields in dispute and a separate *khassra* and *khatian* prepared; the records of the villages being completed after their return from the Settlement office to the survey camp.

It was held by Mr. Maude that no boundary disputes could be instituted after the close of the *khanapuri* and that claims put in at the time of attestation should be dealt with as ordinary objections.

His orders were generally interpreted by Assistant Settlement Officers to mean that the exterior boundary of a village could not be altered save by an order under the Survey Act V of 1875, and the correction of the records at the time of attestation was generally made by creation of new *tahsil-lahidas*. It has, however, been subsequently held that an Assistant Settlement Officer framing a record under the Bengal Tenancy Act has power at any stage of the operations to enquire into disputes as to the village within which any lands are situated and in cases tried formally under section 105 and section 106 a good many external boundaries have been changed.

Besides the ordinary disputes between villages in the Moghulbandi, it has been necessary to decide a good many between the temporarily settled and the permanently-settled area, and some between the Moghulbandi and the Tributary States. In the early correspondence it was laid down by the Board of Revenue,† that the Survey and Settlement officers could survey the entire

* See Appendix B. II, Rule 52, etc

† Board to Government, No. 781A., dated 3rd October, 1891.

boundary, reporting disputes with Tributary Mahals to the Superintendent for decision under Act XX of 1850.

In 1892-93 a procedure was agreed upon whereby in every case of a dispute with a Tributary Estate an enquiry should be made by an Assistant Settlement Officer in conjunction with an officer deputed by the Superintendent of the Tributary Mahals, and the result of their enquiry reported to the latter officer for a decision. In accordance with these orders reports were submitted by Assistant Settlement Officers as to the boundaries of Nilgiri and Keonjhar in Balasore district, and of Keonjhar, Dhenkanal, and Atgarh in Cuttack, and have been decided by the Superintendent. Generally the revenue survey line has, as far as possible, been followed, but the maps of the wilder portions being on the scale of 1" = 1 mile only, it has been difficult to relay them with any great degree of accuracy and the parties have generally agreed to a fairly straight line.

The Balasore disputes are by far the most important and unfortunately owing to the omission to give effect to the so-called *monocasa* decisions in the revenue survey maps they had to be re-opened in 1898. These were decisions given by competent authorities, before the final completion of the Revenue Survey proceedings, which modified boundaries as laid down in the Revenue Survey maps.

Act XX of 1850 having in the meantime been repealed by Act XI of 1893 the powers of the Superintendent were such as he holds under clause 10 of the sanad, and the Settlement Officer was vested with powers of a Commissioner under clause 10 for the purpose of deciding their disputes, an Assistant Settlement Officer and the Dewan of Mohurbhanj being appointed as assessors for the purpose of the preliminary enquiry.

410. Up to June, 1891 when the demarcation of 462 square miles had

The survey village.

been completed in the Cuttack district the *village* was understood to mean the fiscal unit shown as a

village in the papers of the last settlement and was demarcated accordingly. As to the disadvantages of this system I here quote from Mr. Reilly's letter No 27T.P. of the 29th June, 1891:—

"Unfortunately, however, the demarcation has been hitherto done in accordance with the boundaries given in the old Settlement papers and not in accordance with the revenue survey records. The truth is that all the registers in the Collector's office, as well as all proceedings taken in connection with sales, *batwaras* or transfer of property, the boundary and area of the property has I believe, always followed the old Settlement papers, and not the revenue survey records. In Bengal the Collector's registers have been based on the revenue survey records and the *thakbust* map. In Orissa, however, no *thakbust* survey was ever made, the old Settlement papers taking their place. The revenue survey maps in Orissa were thrown aside as next to useless, and the Collector's registers have been written up in accordance with the old survey papers. It may be said that, seeing that the boundaries as given in the old Settlement papers are familiar to all concerned, it would have been as well to keep to these boundaries, and not those laid down by the revenue survey records. Apart from the fact that a departure of this kind would require the special orders of Government, I am not prepared to recommend this arrangement. To separately demarcate and traverse each detached block detailed in the old Settlement papers, would, in my opinion, put Government to much useless expense. Not only would the cost of the demarcation be needlessly increased, but the cost of the traverse survey and stone-embedding would be raised to three or perhaps four times the sum it would cost if we adhered to the revenue survey records.

"If we demarcate each separate village or detached block, in many cases consisting of a few acres, as detailed in the old Settlement papers, we should have to traverse over 16,184 separate villages in Cuttack, and 3,784 in Puri; while if we adhere to the revenue survey records, the number of villages to be traversed would be only 4,188 in Cuttack and 1,430 in Puri. It will be seen that the amount of traverse work to be done would be reduced by one-fourth and the stone-embedding would also be reduced to one-eighth of the amount that would be necessary if we followed the old Settlement papers."

Meanwhile the practice of the Survey Department varied in different areas. In the Tangi Circle the *tahsilalahidas* found within the exterior ambit of the revenue survey village were treated as so many separate villages, a note being made against the numbers in such *tahsilalahidas* that they were transferred to the village the name of which they bore and details as to area, &c., left blank. In Puri district we find from Mr. Walsh's reports that the practice was to give independent serial numbers to the plots included in the *tahsilalahida*, and to prepare a separate *khura*, so that each *tahsilalahida* was practically treated as a separate village, but without any necessity for reduplicating numbers.

Some correspondence followed between the Survey and the Settlement Departments and in his letter No. 682, dated the 5th December 1891, Colonel

Sandeman, the Deputy Superintendent of Survey then in charge of the Orissa party, wrote :—

"Let us suppose there are two *mauzas* and in the latter there are two portions of A. The map of B will be numbered throughout and the fields in the portions which belong to A will find their proper places in the *khasra* of B in which their proprietary (*sic*) and the fact of their being a portion of A will be recorded. When the *khatians* of A and B are prepared, they will be by rights omitted from B and find their places at the end of the *khatian* of A."

With the modification that the separate *khatians* prepared for the *tahsilalahidas* of A continued to be kept with the records of B, this order remained in force until the conclusion of the survey operations, though it was variously interpreted. Generally the traverse took as their unit the existing "*mauza*" as pointed out by the villagers and plotted the village on a 4" scale. Comparison was then made with the old 4" maps of the revenue survey, and whenever any differences appeared they were ordered to be noted for the information of the Settlement Department. Actually very few notes of such discrepancies appear to have been recorded. All *tahsilalahidar* blocks over 50 acres in area were separately traversed, but not plotted separately. In 1893, at the instance of Mr. C. A. Radice, the Survey were asked to demarcate on their maps the boundaries of *estates* as being practically equivalent to *tahsilalahidas*, but the question being considered by the Director during his visit to Orissa in August 1893 he recorded his opinion as follows :—

"Mr. Radice is said to have asked that boundaries of *estates* should be marked on the maps. But *estates* are often not compact. I do not think that this should be attempted. It is enough to mark the *tahsilalahida* boundaries on the maps."

Accordingly the attempt to demarcate *estates* was abandoned, but there were many practical difficulties, and in spite of the repeated orders to reconstruct the revenue survey villages it was often found impossible to do so.

In 1893 a suggestion was made that in the case of large villages the unit of survey should be the hamlet, "*tolah*" or "*sahi*." But Mr. Maudo in his letter No. 1093 of 20th April, 1893 to the Director of Land Records reported that it was too late to effect any change in the existing rules. As a matter of fact the Survey Department had in several cases made into separate villages the hamlets included in one revenue survey village, as in the case of *mauza* Bidhyadharpur of Pargana Bakhrabad now surveyed as three separate villages.

To explain the difficulty of following either the revenue survey or the records of the last settlement it is necessary to give some account of the term "*village*" as used in Orissa.

From an early time there appears to have been confusion between the terms "*mauza*" meaning village, and "*mahal*" meaning estate. Each *pargana* originally contained a certain number of *taluks* or *estates* and each village belonged to one or the other of these *taluks*.

Then came divisions, sales, and other exchanges of lands, so that the proprietor of village A, of estate X, became possessed of lands in village B, belonging to estate Y, and for convenience collected rents from these lands along with those of village A.

In the last settlement these lands were treated as forming part, not of estate X only, but of village A, and in the measurement papers of village B would be described as "*tahsilalahida*" or "*separate collection*" lying in B, but belonging to A, and would be excluded from the area of village B as *dakhilkharij* lands, i.e., lands transferred from B to A. Sometimes the *amins* went further and measured such isolated plots ("*dianchaks*") as part of the village to which they had been transferred, the land finding its place in the field book of A and being entirely omitted from that of B. In this case the settlement papers would not show the existence of the isolated plot in village B though it would appear in the revenue survey map. The same thing might happen within one estate also if the landlord's agent or the tenure-holder who collected the rents of village A also collected those of certain lands in village B. Again portions of villages might be alienated by sale or gift or become separate estates though not with the dignity of a *taluk*. The area of these lands would be excluded from that of the villages of the *taluk* and each such portion would be a *tahsilalahida*, or a "*dianchak*." Often the Settlement Department lumped together a

number of such portions and created of them one village, but this was by no means always the case.

This is a general account of the origin of the revenue villages of Orissa, but the nomenclature was by no means always consistent and what appears to have been practically done was to follow the zamindars' papers with all their inconvenience and inconsistencies.

In the present settlement it was desired really to find the *gram* or village locally known by one name and included within one periphery.

This in most cases is shown in the *rakba jama-kharach* or statement of village areas prepared at the last settlement, in the Collector's *mausawar* register and in the revenue survey maps. In the area statements however of both the last settlement and the revenue survey the unit for which details were given was the revenue village and sometimes the local village or *gram* was not even mapped. In such cases the present survey followed the boundaries as pointed out by the villagers.

To illustrate the confusion that was possible I have given in Appendix D extracts from the records of village Ahyas, the most complicated that I have met with. At the revenue survey the lands of 32 villages were mapped on one sheet. Appendix D reproduces the revenue survey area statement for a single one of these component villages. Appendix D 3 shows the same village as given in the Collector's *mausawar* registers, while Appendix D 4 is an abstract of what is known as a *tahsilalahida* statement or comparative table of past and present areas of whole villages such as has now been prepared for every village in the Province. It will be seen that on the present survey sheets have been mapped the lands of 52 original villages or *mausas* now owing to division of estates shown as 111, and 40 *tahsilalahidas*. In the C register 206 *tahsilalahidas* are shown, but the present records have been simplified by including most of them without any distinction in the villages shown in column 5 to which they appertain. Appendix D 1 shows a *tahsilalahida* statement of a moderate sized village containing, according to the Collector's *mausawar* register, lands of one *taluk* and a single *tahsilalahida*.

411. The procedure for the writing of *khowats* is governed by Rule 9, Chapter VI. of the rules under the Bengal Tenancy Act which runs:—

Preparation of draft *khowats*.

"(a) The proprietary *khowat* shall show the character and extent of proprietary interests; and when there are large tenure-holders, the character and extent of whose interests may, in the opinion of the Revenue Officer, require it, such interests shall be recorded in a similar form in addition to being recorded in the *khatian*."

"(b) The *khowat* of proprietary interests shall first be drawn up in accordance with the registers maintained by the Collector under the provision of the Land Registration Act VII (B.C.) of 1876. As the record-writing proceeds the proprietary *khowat* shall be corrected in accordance with the facts of possession."

For this purpose it was necessary to supply the Survey Department with copies or extracts from the Land Registration registers, and it appears that copies were indeed taken in May, 1891, but were mislaid, and the *amins* took the field unprovided with any means of checking the landlord's statements.

No *khowats* were prepared in the field in 1891 and the resulting inconvenience is well set forth in a report by Babu Chaku Lal Sirkar, one of the circle officers, which is here quoted:—

"The want of a *khowat* is causing much inconvenience, for I am often in the dark as to whether the *mausa* under survey is held under a temporary or permanent lease, or whether it forms part of a revenue free estate."

"I am therefore working entirely in the dark as to the interests of the landlords and many subordinate tenure-holders in the tract under my jurisdiction. I have to trust entirely to such information as I can gather from the landlord's agents and others in the *mufasal*."

In order to remove these difficulties, rules for the preparation of *khowats* were drawn up by Mr. Reily for the season of 1891-92, but the scheme broke down and the *khowats* were either prepared in recess by the Survey Department without the aid of the Settlement Officers, when they were generally little more than copies of the Collector's registers, or they were written in the field at *khanapuri* or preliminary attestation, and were a record of *mausawar* possession without reference to the names of the persons recognised by the Collector as proprietors of the estate. The difficulties met with are set forth in the following

extract from a letter, No. 678, dated 18th November, 1892, from the Deputy Superintendent of Survey to the Settlement Officer:—

"The preparation of draft *khewats* is not ordinarily a duty of the Survey Department, and hitherto we have always been supplied with draft *khewats* before commencing *khanapuri*. Last season, however, owing to the failure of the Settlement Department in supplying these draft *khewats*, it was decided in April that the draft *khewats* should be prepared by the Survey Department for the remainder of the season. We were then (*i.e.*, during last week of April) supplied with blank forms of *khewat* Part II, and form 19 (*khewat* Part IV, Tenure-holders), but no instructions as to their filling up, although asked for, were given. These forms were issued to the *khanapuri amins* who prepared, the *khewats* in the field. Copies of the Collectorate registers were not supplied till late and comparison had therefore to be made after the field season had closed.

"Draft *khewats* Part I were supplied by the Settlement Department, but as these were made out *mahalwar* they were useless to us in that form and had to be made out *mausawar*. This was done in the case of such *mausas* as we could identify on the *mujmilli* map, but the *kharij-dakhil* portions could not be traced. The *mausas* we could identify were sent out into the field and the *kharij-dakhil* portions are now being sent to the Assistant Settlement Officers to file with the *mausas* to which they belong.

"The forms of *khewat* Part III were not received till after the close of the field season."

In the next season, 1892-93, draft *khewats* were prepared by the Settlement Department from the Collector's general registers of revenue-paying and revenue-free lands and were supposed to be attested at the time of *khanapuri*. *Khewats* so prepared were however but little better than rough drafts, and in 1893 elaborate rules for the attestation of *khewats* were drawn up by Mr. Radice and approved by Mr. Maude, and with some modifications were eventually incorporated in the attestation rules printed in Appendix B.

The principle of the rules was that for each revenue-paying estate a *khewat* should be prepared based on the entries in the Collector's land registration register A, as corrected by the mutation register D. That no mutations or corrections in the names or shares recorded in the Collectorate should be allowed save under the orders of the Assistant Settlement Officer, and that all such mutations should be reported to the Collector to enable him to take action under Act (VII B.C.) of 1876.

From this *mahalwar khewat* was to be extracted the *mausawar* or village *khewat*.

There was a good deal of discussion as to the proper method of dealing with cases where, owing to some private and unregistered arrangement, the proprietorship of the village differed from that of the whole estate, and as far back as 1893 it was decided that as all the registered proprietors had under the Land Registration and Tenancy Acts the right to sue for and recover rents, even in the villages in the sole possession of a single co-sharer, they must all be recorded; but that where the interests of the proprietors in a particular village were clearly proved to differ from that in the estate as a whole, a note should be made of the fact in the remarks' column of the *khewat*.

Unfortunately these orders came rather late and were not always understood, so that many of the *khewats* were records of ownership in the village only, while in every circle the *mahalwar khewats* were left sadly incomplete.

Strenuous efforts were made at the time of settlement of rents to complete and correct all the *khewats*, but it was found very difficult to procure the attendance of all the zamindars, and when it came to taking *kabuliyats* for the payment of revenue so many mistakes were found that in December, 1897 after a conference with the Director of Land Records it was decided:—

That the *khewats* framed at attestation should not be finally published.

That at the time of taking *kabuliyats* the *mahalwar khewats* should be finally corrected and the notes as to differences of possession in particular villages verified by the *kabuliyat* officer.

That from these *mahalwar khewats* fresh village *khewats* should be prepared and after final publication in the village bound into the volume of the record of rights. It is hoped that by this means a maximum degree of accuracy may have been attained while still complying with the provisions of the law as to final publication.

There have been many forms of *khewat* in use at different times, but under the last rule they will all, except in parts of the Puri District, be in a form which differs chiefly from that given in Appendix G of the Survey and Settlement Manual of 1895 in that the area is divided into "Assessed," "Un-assessed" and not into "Cultivated," "Uncultivated," and that the *mufassal* assets of the village and not the *sadar jama* of the estate are shown,

Besides this *khewat* of revenue-paying estates, *khewat* Part I, three other *khewats* are prescribed by the Survey and Settlement Manual and were prepared in the early years of the operations.

Khewat Part II, is a *khewat* of revenue-free estates and under the instructions originally issued by Mr. Reily should have been prepared from the Collector's Land Register B, and corrected at the time of *khanapuri*. This, however, was not done, and in the attestation camps this *khewat* was generally discarded in favour of a comparative statement of revenue-free lands. It continued however to be copied from these statements until the visit of H. H. Sir Charles Elliott to Orissa in March, 1894, when, under his orders, it was discontinued. Full particulars regarding revenue-free lands are entered in the final records and have been finally published.

Khewat Part III corresponds to the Land Registration Register B, Part II, of lands occupied for public purposes. It was supposed to be prepared at the time of attestation and Assistant Settlement Officers were enjoined to take particular care in verifying the contents. It was not a convenient form and its preparation appears to have been abandoned in 1894, and the form is now rarely to be found in any record and has not been included in the record of rights. Full particulars regarding the lands occupied for public purposes are however entered in the final records, and registers prepared for each department have been made over to the Collectors and to the Departments concerned.

The tenure-holders' *khewat* was originally prepared in form No. 19 of the Survey and Settlement Manual of 1888 for all *muqaddams* and other proprietary tenure-holders. It was not however decided until 1893 who were to be considered as proprietary tenure-holders and the form was by no means always filled up even in villages where there were *muqaddams* or *sarbarahkars*. In 1896 a form was devised for Orissa and was prepared for a good many villages at the stage of settlement of rents, but this in turn gave way to the form which was prepared at the time of settling revenue, revised when taking *kabuliyats*, and after final publication bound up with the *khatians* in the volume of record of rights.

412. The following figures taken from the returns of the Survey Department will show the annual progress and cost of survey and of the *khanapuri* or preliminary writing of the record. They do not therefore show the cost of supervision by the officers of the Settlement Department, which was heavier in the later years owing to the greater number of Assistant Settlement Officers employed, but it is practically impossible to separate the charges on this account from those for attestation to which the whole amount is therefore debited* :—

413. The following is a statement by districts showing the progress of the major operations from the beginning :—

		AREA COMPLETED IN SQUARE MILES.			
DISTRICT.	Survey year.	Traverse Survey.	Cadastral Survey.	Record-writing.	Topographical Survey with village boundaries.
Puri	1889-90	413	358	358	...
	1890-91	481	364	364	...
	1891-92	185	307	307	...
	1892-93	...	...	...	...
	1893-94	...	105†	105	...
	1894-95	123	...	...	162‡
Cuttack	1890-91	501	331	279	...
	1891-92	1,286	1,453§	1,164	...
	1892-93	...	485	826	...
	1893-94	15	...	...	...
	1894-95	646	5	5	661
Balasore	1891-92	588	...	...	...
	1892-93	1,145	1,084	1,069	...
	1893-94	...	649	664	...
	1894-95	196	†	†	190
Total	.....	5,523	5,141‡	5,141‡	1,013

† Revision. § Of this 364 is revision.
* See however Chapter XXV.

‡ 13 square miles of overlaps on Madras excluded.

414. The amounts expended from 1889 to 1895 are as follows :—

TOTAL SUMS EXPENDED.						
			Traverse Survey including demarcation and stone- embedding,	Cadastral Survey including maps and areas.	Record- writing.	Other heads including Topographical Survey with boundaries.
			Rs.	Rs.	Rs.	Rs.
Puri	1890-91	...	19,687	47,132	10,413	1,850
	1891-92	...	9,758	33,696	9,453	13,529
	1892-93	...	...	4,998	3,454	776
	1893-94	...	...	3,032	3,261	...
	1894-95	...	3,962	366	510	4,708
Total			33,407	89,224	27,091	20,863
Cuttaek	1890-91	...	22,388	34,682	9,399	3,548
	1891-92	...	47,880	1,10,666	39,980	15,286
	1892-93	...	3,794	59,427	76,567	1,371
	1893-94	...	798	...	32,563	374
	1894-95	...	13,953	6,277	814	6,219
Total			88,813	2,11,052	1,59,328	26,798
Balasore	1891-92	...	17,740	...	...	...
	1892-93	...	49,601	79,992	33,723	47
	1893-94	...	842	50,527	45,096	...
	1894-95	...	3,823	9,991	3,920	1,767
Total			72,006	1,40,510	82,739	1,814
GRAND TOTAL			1,94,226	4,40,786	2,69,158	49,475

N.B.—In paragraph 622 the cost is returned at Rs. 2,43,091, but some of the cost in column 5 above was incurred in permanently-settled areas.

415. The following table shows the cost rates per square mile in the three Districts. P. stands for Puri; C. for Cuttaek; and B. for Balasore.

Cost per square mile.

COST RATES PER SQUARE MILE.						
			For Traverse Survey.	For Cadastral Survey.	For Record- writing.	REMARKS.
1890-91	P.	...	40.9	68.5	28.4	
	C.	...	42.7	76.6	29.3	
	B.	...	Nil	...	...
1891-92	P.	...	58.4	109.8	30.7	
	C.	...	38.2	88.8	36.7	
	B.	...	24.2	33.9(a)	31.0(a)	(a) Revision Survey of 1878-79.
1892-93	P.	...	...	11.5	...	
	C.	...	...	43.4(c)	...	
	B.	...	...	56.0(a)	38.5(b)	(b) Arrears.
1893-94	P.	...	...	68.8	34.6	
	C.	...	53.2	...	27.0(c)	(c) Temple lands.
	B.	...	...	75.2	29.0(d)	(d) The rate of revision survey.
1894-95	P.	...	32.2(s)	...	70.0	
	C.	...	21.6(e)	...	...	(e) Traverse survey 2 nd scale.
	B.	...	20.1(e)	...	...

The total cost of the survey and record-writing varied from Rs. 137 per square mile in Puri in 1890-91 to Rs. 199 per square mile in Puri in 1891-92.

The high rate for cadastral survey in 1891-92 may be accounted for by the difficulty of getting any decent work out of the local *patwaris* and *amins*, and that of traverse partly by the difficult nature of the country.

Comparison with other surveys. 416. Taking the years 1891-95 the mean annual cost rates in Bihar work out to—

				For square mile.
Traverse, &c.	...	...	...	38
Cadastral Survey	...	...	...	67
Record-writing	...	...	...	68
Total				168

For Orissa the average expenditure on these operations in the 5 years of 1890-95, during which the survey was in full swing, came to—

				Rs.
Traverse, &c.	...	...	...	38
Cadastral Survey	...	...	...	93
Record-writing	...	...	...	56
Total				187*

The greater cost in Orissa may be said to be due almost entirely to the difference in the cadastral survey; and this may be accounted for by the acknowledged inferiority of the Uriya *amin*.

CHAPTER XVII.

ATTESTATION.

417. After the *khanapuri* or "filling up of the forms" the draft record had to undergo the process known as "attestation," or verification by a revenue officer. Where the

khanapuri has been good this would naturally be the simplest of all the stages of a Settlement under the Bengal Tenancy Act. The revenue officer would have before him a complete record of the holdings in the village and a statement of the rents claimed by the landlords if not by the tenants. It would only remain to read out to the tenants their *khatians*, to settle any disputes left over from *khanapuri* and to enter the rent and status. Indeed, in theory, the process should be one of almost mechanical monotony; but in Orissa the *khanapuri* of two-thirds of the Province was done while the rules as to forms and procedure were still in a state of flux.

The survey with their huge camps had far outstripped the revenue officers, and records, framed, under different sets of rules, by *amins* whose natural perversity had been imperfectly checked, were found to be full of mistakes.

Tenants, ignorant and apathetic, neither understood nor cared to understand our system of measurement, and could with difficulty be persuaded to take the trouble to attend the *amin* in order to point out their own fields. Landlords were, as a rule, little better; many did not take the trouble to file correct papers; others, while understanding the value of the Settlement record, deliberately altered their rent-rolls in the way they thought most advantageous to themselves. With such a record, of which the only reliable portion was the map and the field area statement, attestation, far from being simple, became the most important and difficult process of the whole Settlement.

418. Attestation began first in the Circle of Rahang, Serai, and Chaudhikud under rules framed by the first Settlement Officer, Mr. A. K. Ray, working under Act VIII

(B.C.) of 1879* and the Settlement Regulations.

The main features of the system were—

(a) The despatch to each village of a *muharrir* to do the preliminary attestation of the record before the visit of the Assistant Settlement Officer.

(b) The visit of the Assistant Settlement Officer to the village and the reading out of the *khatians*, in his presence, to the landlords and tenants.

* In the purely temporarily-settled areas the cost works out to Rs. 181 per square mile, see end of paragraph 623.

The main defects of his system are summed up by Mr. Walsh as being—

- (1) The insufficient number of attestation *muharrirs* employed at a time.
- (2) The delivery to one *muharrir* of the records of several villages.
- (3) The absence of a proper inspecting staff.
- (4) The omission to distribute "*parcha slips*."
- (5) The incompleteness of the instructions to attestation *muharrirs*.
- (6) The incompleteness of the forms handed over to the *muharrir* to be filled up in the village.
- (7) The omission to take on the *khatians* the signature of the parties.

419. After the appointment of Mr. Reily as Settlement Officer, detailed

rules for attestation under the Tenancy Act were drawn up and submitted to the Director and Commissioner, and in July, 1891 we find the following description of the procedure:—

Mr. Reily's rules.

"They (the Assistant Settlement Officers) test the *khanapuri* as it is being done by the Survey Department. Afterwards, when the records of villages are received from the Survey Department, the following procedure is adopted :

"Notice is given in the village that attestation work will be begun on a date not less than ten days from the date of notice. An attestation *muharrir* is then sent to the village, who reads out to the raiyats and zamindars, or their representatives, all the entries in the *khassas* and *khatians* as made by the Survey Officers. When these entries are disputed, the *muharrir* makes out a list of such disputes; and if the dispute is due to a manifest error which is admitted by both parties he notes the fact in the dispute list. When he has completed the attestation in this way, the *muharrir* reports to the Assistant Settlement Officer, who then gives the dispute list to the *kanungo* and deputes him to the village with instructions to arrange the disputes if he can.

"The *kanungo* returns the lists showing what he has done towards arranging the disputes. The Assistant Settlement Officer next goes himself to the village. He assembles the raiyats and zamindars or their agents and reads over the entries which are not disputed, then takes up those which have been disputed but arranged by the attestation *muharrir* and *kanungos*, and finally enquires into points still in dispute and comes to a summary finding upon them. He then, in or near the village, enters in the *khatians* the status of the tenants ascertained by himself, and the total amount of each tenant's rent, and he records the rate of rent as stated by the parties where there is a rate.

Mr. Son, then Assistant Settlement Officer of the Tangi Circle, reported that the *khanapuri* was so incorrect that he found it necessary for the attestation *muharrir* to go over every field again with the *khassra* and also to distribute fresh *parchas*, and Mr. Walsh in the Serai, Rahang, and Chaubiskud Circles made a similar check.

420. During the season of 1891-92 the several Circle officers drew up detailed instructions based generally on Mr.

Attestation in 1891-92.

Finucane's note, but greatly differentiated to meet local necessities. The most complete of these appear to be the rules in force in Mr. Baroda Charan Mitra's circle, which were approved by Mr. Reily and printed by the Director in October, 1892. They are typical of the procedure in those circles in which the *khanapuri* had been completed before the year of 1892, the salient features of the system being—

- (1) Every circle was divided up into a number of groups of villages each in the charge of a *munsarim*.
- (2) Under each *munsarim* were employed a number of attestation *muharrirs*, as a rule one for every ordinary village and two more for larger villages.
- (3) The attestation *muharrir* was, before beginning his work, provided with that—
 - (a) The *khassra*, *khatian* and map.
 - (b) *Parchas* in duplicate already filled up by *thika muharirs* in this office.
 - (c) *Lakhiraj*, *tanki minha*, etc., statements for which the columns regarding the last Settlement had been previously filled in from the old records by *thika muharirs*.

- (4) The attestation *muharrir* on arriving in the village distributed the *parchas* to the tenure-holders and raiyats.
- (5) He then attested the record by reading over and explaining the *khatians* in the village, filling up at the same time the columns of rent and rights. Where necessary he visited the field with the parties after his day's work in the village.
- (6) All mistakes were entered by him in the *badar fard*, or mistake-list.
- (7) If there were no disputes, the attestation was completed by taking the signatures of the parties to the *badar* corrections and *parchas*, and in most circles by correcting the *khatian*.
- (8) Disputes were entered in the *badar fard*. If amicably decided with the assistance of the attestation *muharrir*, the parties and he himself signed the *badar* and the *parchas*. If not so decided, the signature columns of the *badar* remained blank and the *parchas* were left unsigned.
- (9) The *munserim* inspected the work of the attestation *muharrir* and endeavoured to bring about an amicable settlement of those disputes the attestation *muharrirs* could not deal with. He treated the disputes in the same manner as the *muharrir*.
- (10) At the time of preliminary attestation the *muharrir* filled up the blank columns of the *lakhiraj*, etc., statements.
- (11) He also attested the *khewat*, entering the disputes in the *badar fard*.
- (12) When the preliminary attestation of a group of villages was completed the final attestation was performed by the Assistant Settlement Officer at a convenient centre. He employed, where possible, as his *muharrirs* the men who had performed the preliminary attestation; this was understood to form part of their duties. When this was impossible, each Assistant Settlement Officer made his own arrangement for appointing men and dividing the 12 annas per hundred numbers, which was the rate sanctioned for each village.
- (13) The *khatians* were read over to the raiyats whose signatures are taken on the bottom of the page. The *khatian* was also signed by the landlords and tenure-holders.
- (14) The Assistant Settlement Officer decided summarily disputes still outstanding and examined and initialled each page of the *khatian*. The *khatians* were corrected according to his decision.
- (15) He examined and initialled the entries of the *lakhiraj*, etc., statements.
- (16) He finally attested the *khewat*.
- (17) In most circles *adhai-jama-fards* (statements of collections) were prepared, in some at the time of preliminary and in others at the time of final attestation.

Defects of the rules of 1892.

421. The main defects of the system appear to have been :—

- (a) The isolation of *muharrirs* in villages where no effective supervision was possible.
- (b) The absence of a gazetted officer before whom objections could at any time be preferred.
- (c) The payment of *muharrirs* at contract rates.

Mr. Mitra was of opinion that with the procedure described, he could efficiently attest 3,000 fields in a day or $\frac{1}{3}$ of a lakh in a month. Subsequent experience has shown such an outturn to be absolutely incompatible with good work, even with all the records already written in the correct form, which was not always the case in the early attestation, and in a subsequent paragraph* will be found an account of the disastrous results of thus forcing the pace.

422. In the *khanapuri* of 1892 an attempt had been made, notably in the Gope Circle, to do away with the stage of preliminary attestation. The *khanapuri* officer visited the village from time to time while *khanapuri* was proceeding, disposed of all disputes, and entered rents and status.

As soon as the *khasra* was complete, and while the Survey officers were still on the ground, the Assistant Settlement Officer visited the village, asked each raiyat his rental and status and took his signature to the *khatian*. This was the final attestation, and we find records finally attested in this manner before the areas had been entered in the *khatian* or before the *parchas* had been distributed, and even in one or two instances in the absence of a map.

This was clearly not a success, and in September, 1892, the Settlement Officers proposed that the Survey Department should prepare only a map and an area statement leaving the *khanapuri* to the Settlement Department. This proposal was considered impracticable and a compromise was effected by which the *khanapuri* was to be done under the joint supervision of the two departments, the Survey being responsible for the map and the Settlement for the other records.

Khanapuri being complete, the records were at once sent to the Survey office, where areas were extracted and entered.

The records were then returned with a trace of the map to the circle officer, who grouped the villages together and issued a proclamation calling upon all concerned to attend before him at convenient centres distant not more than three miles from any village of the group.

At such centre the *parchas* were explained to the tenants and the areas entered in them, if this had not been already done by the camp office. The signatures of landlords and tenants having been secured and all objections disposed of, the Assistant Settlement Officer attested the rent and status which had been already entered at *khanapuri*. The records were then returned to the Survey Department for correction of the trace according to orders on the dispute list and for the compilation of statistics.

423. The rules were still very incomplete and nearly all details were left to the circle officers, who drew up long and elaborate instructions which were submitted to the Settlement Officer for his approval. From these Mr. Mande compiled very complete instructions for the season of 1893-94.

The salient features of the system then adopted were:—

- (a) The periodical inspection of the records by the revenue officer while *khanapuri* was in progress.
- (b) The examination of the records for the detection of serious errors before they were taken over from the Survey camp.
- (c) The preliminary attestation of the records by a *muharrir* in the circle officer's camp.
- (d) The comparison of present entries with the figures in the records of the last settlement.
- (e) The disposal of all disputes and the correction of the record before final attestation.
- (f) The reading out before the Assistant Settlement Officer of the—
 - (1) Name of landlord.
 - (2) Number of fields.
 - (3) Number of *kitas*.
 - (4) Area.
 - (5) Rental as stated by landlord.
 - (6) Rental as stated by tenant.
- (g) The summary decision by the Assistant Settlement Officer of the rent and status of the holding.
- (h) The return of records to the Survey camp for extraction of statistics and correction of the original map.

Corrections in the rules continued to be made during the whole of the year 1894 chiefly with a view to the economy of labour. The rules were finally revised in 1895, and are printed as Appendix B to this report.

424. Unfortunately nearly all the attestation of the Province had been completed before the promulgation of these orders.

Progress in Attestation. The following table shows year by year the number of records attested in each of the three districts:—

YEAR.	Cuttack.	Puri.	Balasore.
1890-91 ...	69	278	Nil
1891-92 ...	1,382	1,613	Nil
1892-93 ...	963	62	511
1893-94 ...	564	1	620
1894-95 ...	1,356	23	1,800
1895-96 ...	670	120	686
Total ...	4,904	2,097	3,607
Total number of records to be attested ...	4,876	2,109	3,607

The figures are only approximately correct, as it has been found impossible to reconcile the returns of different years, which being added together give in Cuttack a total of more villages attested than there are in the district. Figures in Balasore have been adjusted; in Cuttack probably some villages are shown twice, having been twice attested; in Puri a few village records have been amalgamated.

425. The wording of the former rules framed by Government required the Assistant Settlement Officer to be in or near the village at the time of attestation of the record and settlement of rents, and at first *muharrirs* were actually deputed to the villages to do the preliminary attestation; but when this had been accomplished the Assistant Settlement Officer, instead of going to the village himself and reading out the *khatians* on the spot, generally summoned the tenants to his camp for the purpose of finally attesting the record. Both in Orissa and elsewhere it was found that the attempt to do attestation in each and every village led to waste of time and supervising power, and in a revenue circular issued by the Board in 1893 it was laid down that the tenants might be made to attend a camp distant not more than three miles from the furthest limit of their village, objections being as far as possible disposed of in the village and on the spot. This necessitated a careful arrangement of circles and a strict adherence to programmes, and it was at one time the practice for the attesting officers to open branch camps two or three miles away from their centre, at which outlying villages were attested. The camps were in charge of a head *muharrir* and were visited periodically by the Assistant Settlement Officer for the purpose of disposing of disputes and for final attestation. These camps however led to a waste of time and were difficult to supervise properly, and their opening was accordingly discouraged and eventually forbidden save for very special reasons. The same rule applied to fair rent camps and was generally observed.

426. In the *khassra* the arrangement of fields was purely geographical and presented no difficulty once the map of the village had been prepared. At first some doubt was felt as to whether *tahsilalahidas* should be treated as separate villages and allotted separate *khassras*, but it was eventually decided that one *khassra* only should be prepared with a single set of serial numbers running geographically from the north-west to south-east corner.

427. The unit of the *khatian* is the parcel or parcels of land held by a tenant or group of tenants in a village as a single tenancy, and it is therefore necessary to prepare a separate *khatian* for every tenure-holder, raiyat, and under-raiyat in each estate in a village, and for the lands held in direct possession by each separate group of proprietors and tenure-holders; and if a cultivator holds lands in more than one share of a partitioned estate or tenure, a separate *khatian* for his holding in each such share.

This is the rule laid down in the Survey and Settlement Manual and its applicability to Orissa appears to have been recognised from the very beginning

of the work; but the principle was not at first carried to its logical conclusion, that only the lands of a single tenancy should be entered in any one *khatian*, and that for every separate status separate *khatians* should be prepared.

This appears indeed to have been the intention of Mr. Reily, but while *khanapuri amins* were absolutely forbidden to record status it was impossible for them to excerpt *khatians* by classes. In the *khanapuri* rules of March, 1892, it was laid down that "the slips for tenure and under-tenureholders will be separated by the *khanapuri* officer from raiyats' *khatians* after determination of each tenant's status and will be separately filed." This rule was unworkable, the amount of labour involved being equivalent to the personal *khanapuri* by the revenue officer of the village. These rules went, however, still further and directed that if a raiyat held lands under numerous petty landlords in a village, one *khatian* for the whole would suffice. This rule accounts for much of the confusion to be found in the records of that period.

In the records prepared in the season of 1890-91, the confusion appears to have been worse; we find from the reports of the Assistant Settlement Officers that revenue-free, resumed, and raiyati lands were not infrequently found in the same *khatian*, necessitating the complete re-arrangement of the *khatians* and a great deal of re-copying. For example, in the Rahang circle the number of *khatians* was increased during attestation from 13,035 to 16,079, and in all the circles of Puri, and the Tanghi Circle of Cuttack, the Assistant Settlement Officers thought it desirable to re-copy a very large percentage of the *khatians*.

It was not until the visit of the Director in September, 1892 that definite orders were passed as to the arrangement and division of the *khatians*, status by status. The rules then framed have been added to since, but differed but little from those in Rule 68 of Appendix B, Part III. to this report. For the purpose of settlement of rents this arrangement was subsequently modified,* but the principle remains the same, viz., that the arrangement of a volume is first by estates or *tahsilalahidas*, within each estate by separate groups of landlords, within each such group by status, and within each status, an alphabetical arrangement of tenants. In his inspection note of 1894 His Honour Sir Charles Elliot recorded his opinion that too much pains was being taken to separate statuses, and a long correspondence was started which led to a final settlement of the question.

In a note written in December, 1894, Mr. R. Nathan made the following observations on the *khatian* writing and *tirij* writing:—

"There are three possible courses—

- "(i) To prepare separate *khatians* for separate classes of interests.
- "(ii) To enter different classes of interests in the same *khatian*, but to place together the plots belonging to each separate interest, and to arrange the various tenures in a regular sequence in the *khatian* page.
- "(iii) To enter different classes of interests in the same *khatian* taking no heed in the sequence of the plots as to the class of interest to which each plot belongs.

"(3) The third of these systems is the least satisfactory. In addition to the points noted in paragraph 4, the following disadvantages would arise: The *khatian* would present a confused picture both to the raiyat and the attesting officer and clerks. This would entail loss of time both at preliminary and final attestation. To explain the *khatian* to the raiyat it would be necessary to take out the areas included in the different classes of tenure, and make sure that he realised the plots included in each. If from the first there has been a separate *khatian* and *para*ha, this would be unnecessary. As Mr. Maude points out, the want of clearness in the *khatian* would open the way to errors that might otherwise be avoided. It would also be necessary to further confuse the *khatian* by entering different classes of rents. The present *khatian* forms are not arranged for this. The *khatian* would require a further attestation: a status column would have to be substituted for the single status space. Finally, when it came to preparing the *tirij*, more time would, I think, be spent in separating out the interest than would have been necessary had the separation been performed in the first instance.

"(4) With regard to the first two methods, the separate *khatian* system has the following advantages:—

- "(i) Greater facility in the preparation of the
- "(ii) A valuable use of the *tirij* is an index list. Mr. Maude points out this important aid to attestation would be lost if the *tirij* was not arranged in the same manner as the *khatians*.

* Cap XX. paragraph 489 and Appendix C.

"iii) It would be necessary to avoid the difficulties indicated in paragraph 3 to complicate the *khatians* by totalling the area held under each class of tenure. Again a rent and a status column would be required for the entries relating to each class of tenure.

"(iv) It is convenient at final attestation to take up each class of tenure in turn. The same classes of questions and references are apt to arise in considering the different *khatians* regarding one class of interest, and it is convenient to dispose of them before going on to the consideration of another class.

"(5) The special advantage of the second and third methods is the saving of space and reduction in the bulk of the record, which tends to become unwieldy. I do not think that this advantage is sufficient to counterbalance the difficulties noted in paragraphs 3 and 4. If the final record is prepared in the form of a *jamabandi* roll, the saving of space would not be very great."

On this the Director of Land Records expressed a doubt as to the practicability of such a division as Mr. Nathan recommended, especially in respect of *thani* and *pahi* fields, and Mr. Nathan explained that he did not propose to have separate *khatians* for *thani* and *pahi*, or *minha* holdings, but that *bazyasti* and similar tenures and the service tenures ought not to be entered on the same *khatian* with raiyati lands.

Mr. Nathan at the conference of 1894 expressed his conviction that the arrangement under which raiyats of *bazyastidars* and *kamildars* came before raiyats holding under proprietors and permanent tenure-holders was sound, as it was convenient at the time of attestation to take up the raiyats of these persons at the same time that their own *khatians* were attested. At the time of settlement of rents it was however necessary to bring together first all tenants paying rent directly to the proprietor; secondly, all lands valued for revenue only or unassessed; thirdly, tenants paying to classes 1 and 2, and rents were not included in the assets of the estate. The order of the *khatians* laid down in Rule 68, Cap. IV., App. B, Part III was therefore modified to this extent*.

All the Orissa officers consulted strongly deprecated the proposal to keep *bazyasti*, *bahali*, *jagir*, and raiyati lands in one *khatian* form, and the Director expressed his opinion that on this point the unanimous opinion of the Orissa officers should be accepted.

It was agreed in conference at Tangi on the 16th December 1894 that it was necessary to distinguish in the *khatians* and in the *jamabandi* between *thani* and *pahi* lands, and that the word "*thani*" or "*pahi*" should be entered against each plot in the *khatians* so far as information can be obtained; but it was thought unnecessary to have separate *khatians* for *thani* and *pahi* lands.

These rules were adopted and continued in force to the end of work, but it was found by experience that at the time of settlement of fair rents, and still more at the stage of compilation, it was an advantage to have separate *khatians* for *thani* and for *pahi* lands, and at re-attestation every separate class was where possible given a separate set of *khatians*.

428. The "entry of rent and status" has been already discussed under the head of *khanapuri*†.

Entry of Rent and Status.

The rules required that both entries should be made or attested by the revenue officer himself, but in practice the entry of status was almost always made either by the *amin* at the time of *khanapuri* or by a *muharrir* in the attestation camp, and was read out to the raiyat in the presence of the Assistant Settlement Officer, who, if no objection was raised, attested the entry with his signature. Similarly in the case of rents the statements of both landlord and tenant were entered by the *amin* or *muharrir*, who if the statements agreed filled up also the column for rent as ascertained by the Assistant Settlement Officer. The entry thus made was read out in the presence of the Assistant Settlement Officer to the assembled tenants and attested. If there was any dispute as to the amount, it was summarily decided by the Assistant Settlement Officer and the entry at once made and attested, no record being kept of the grounds of the finding.

429. Division of a raiyat's holding without the consent of the landlord is invalid alike under Act X. of 1859 and Act VIII

of 1855, nor are landlords in Orissa bound by custom to recognise any such partition. In the case of *bazyasti* and *kharida*

* See Au's 28, Appendix C, Part I

† Cap. XVI, paragraphs 403 and 404.

jamabandi holdings, indeed, to which a *quasi*-proprietary right attaches, the whole or any portion may by custom be alienated, but even in respect of these lands many zamindars have successfully insisted on the payment of a premium or '*salami*.'

In spite, however, of law and custom it was found that raiyats had very commonly alienated portions of a holding and still more often had made a *de facto* division among themselves, the zamindar's papers continuing to show the original raiyat and his holding only.

Payments for rent were credited as made by so and so on account of the original holding.

Necessarily, when the *amin* was preparing the *khasra* and *khatian* in the village the name first given him was that of the man in possession. The original rules of 1803-94 required that he should compare such name with the lists of tenants supplied by the landlord and make entries according to the following rules:—

"In the case of partitions of holding by mutual consent, which have not been recorded in the *jamabandi* papers, the name of the tenant given in the lists of tenants furnished by the landlord should be entered first, and the names of co-sharers after, as joint tenants, and a remark may be made that partition has not been recorded by the landlord.

"If in any case the tenure or under-tenure is held by more than one person, and such persons have privately divided the lands comprised in the tenure or under-tenure among themselves, and the division is not recorded in the landlord's *sherista*, then in the remarks column against the plot in question should be entered '*dakhal* tenure-holder, so and so,' the name to be entered being that of the tenure-holder who is in direct, exclusive possession of the plot in question, and to whom alone the person in possession pays the rent of such and."

Subsequently these rules were withdrawn and the practice was to enter as raiyat the person found in possession, but the rental was not divided, the former area and the whole rent being entered in the *khatian* representing the original holding, while in the *khatians* of the new holdings formed by the partition a note was made that the rent was *burati*, i.e., included in the rent of the afore-mentioned holding.

When, however, it became necessary to settle rents, the rule was that a rent must be settled for every holding to which a separate *khatian* had been assigned, and thus the imperfect partitions recorded at attestation have in the new settlement been completed. The tenants showed a strong desire to avail themselves of the settlement proceedings to have partitions made of their holdings, but this tendency was discouraged as far as possible by insisting on the consent of the landlord being obtained, and refusing to accept obviously inconvenient divisions. Only one zamindar, the proprietor of the large estate of Utikan, made any serious protest against this division of rents and holdings, and he did not long press his objections.

On the whole zamindars were very apathetic in regard to this matter; their objections were not so much to the subdivision of the holdings and apportionment of the rents as to the loss of *salami* or fees payable on mutation and division.

430. In the records of the last settlement were to be found for every

Comparative statements—*Lakhi-
raj Bahal, Jagir, Minha, Bazyafsi*
and *Nijot*.

village and every estate not only totals of the area and rent of every class of land and holding, but details of every holding in which there were raiyats having rights superior to those of the ordinary *paki* raiyat, or tenant-at-will as he then was.

The most important classes were:—(1) *Lakhi-raj Bahal*, or confirmed revenue free grants. (2) The *Bazyafsi*, or resumed revenue free grants. (3) The *Jagirs*, or service grants. (4) *Minha*, or land, generally homestead, held without rent but included in a rent-paying holding. (5) Proprietor's private lands.

For each and every one of these, statements were prepared showing the entries as they stood at the last settlement and the present claimants and areas claimed. The statements were certainly useful as a check, and those of revenue-free and *jagir* lands were almost indispensable to a correct record, but they took up time. In 1894 Sir Charles Elliott recorded his opinion that time was being wasted on their preparation, and accordingly the *bazyafsi* statement was discontinued, and the *lakhi-raj* statement allowed to take the place of the *khawat* of revenue-free lands.

The other statements, however, continued to be prepared until 1896, when all except that of revenue-free lands were stopped.

This last showed the entry in the *suidad* or report of the last settlement, the entry in the Collector's general register of revenue-free estates, and the facts found on the ground, and it continued to be attested and corrected till the end of the work. It was required for the resumption by consent of areas in excess of revenue-free grants.

431. The question of the entries to be made in the *khatian* having been raised at the time of Mr. Finucane's visit to Orissa in February 1892, it was found that the existing form contained many superfluous and useless columns, and the following declaration of the guiding principle was made by the Director:—

Incidents of Tenures. Entry in *khatians*.
 "Nothing should be entered on the *khatians* which is not necessary for the raiyats and landlords to have in the extracts of the records to be subsequently made over to them. The *khatian* is the 'record' which has to be published. Every entry in the *khatian* as published may be made the subject of a dispute which may have to be decided as a suit."

Notwithstanding this declaration and the fact that the form of *khatian* was remodelled, it continued to be the practice to record the name of the crop grown, but nearly all the special incidents of particular tenancies were omitted, those entered being generally—

- (a) Rights of user by the public.
- (b) Conditions on which service tenures were held.

In the record as finally revised and published in the seasons of 1896-97 the following entries were made in the remarks column of the *khatian* in addition to that of status:—

- (a) Right of *thani* and *basyafti* raiyats, etc., to hold at a fixed rent for the term of Settlement.
- (b) Right of purchaser of an estate at an auction sale to assess to rent invalid rent-free grants.
- (c) Right of the public to the free use of grazing and cremation grounds and other reserved lands.
- (d) The fact that the extra rent for a "special crop" grown in a certain field was only payable so long as that crop was grown.
- (e) Liability of certain rents for river-side lands to annual variation.
- (f) Right of fishery in rivers entered in the proprietor's *khatian*.

It was agreed at a conference held by Mr. W. C. Macpherson with the local officers in August 1897 that entries (a), (c), (e), and (f) were properly made owing to the revision of the rule, entry (d) had already ceased to be necessary, and with the orders to settle rents for all rent-free tenancies which came into force from January 1898, entry (b) ceased to be of any use.

In the estate of Madhupur the terms on which certain *Debottar* grants were held were at the instance of the proprietor recorded, but such entries are not usual.

432. Whenever a landlord or tenant objected to any entry in the records, a note was made by the attestation *muharrir* on a list, the "*badar farā*," showing the name of the objector and of the other party, if any, the fields in dispute and the nature of the objection, and no correction of the record was made nor was the *khatian* signed until the Assistant Settlement Officer had passed orders on the objection. Obvious mistakes in which both landlord and tenant were agreed as to the correction to be made were, however, at first disposed of by the *muharrir* or *munsurim* and the records corrected, subject only to the confirmation of the Assistant Settlement Officer; and even under the later and more accurate methods of attestation it was customary to enter on a separate list corrections agreed upon by both parties, taking their signature in token of acquiescence. The Assistant Settlement Officer even in such cases generally called up the parties and asked whether they really agreed to the change before signing the order, and might exercise his discretion in declining to allow mutations in cases of suspected collusion.

A good deal of difference of opinion prevailed as to the best form of entry in these dispute lists. Many of the best and most careful attestation officers

preferred that the *muharrir* should enter nothing beyond the numbers of the fields and the names of the parties, while on the other hand it has been pointed out that if the substance of the dispute is not recorded it is necessary to write a long order to prevent the risk of mistake. The balance appears to Mr. Webster entirely in favour of an accurate record of the nature of the dispute. It enables the Assistant Settlement Officer to see at once what it is he has to find out, and without it he may have to listen to a long rambling story before he catches the drift of the dispute. It takes up some of the *muharrir's* time, but this is much less valuable than that of the Assistant Settlement Officer, and at the same time it is of great assistance to the *muharrir*, who has to interpret an extremely brief order not always very accurately worded.

It must, however, be added that *muharrirs*, unless the supervision be very strict, exact money by their version of the dispute and waste an enormous amount of time in the mere effort of literary composition and in making fair copies. Moreover an over-worked or unconscientious Assistant Settlement Officer may not make independent inquiries or go behind the *muharrir's* version. On the whole I prefer to have a record only of the *khassra* numbers and the names of the parties to the dispute.

Parties were also entitled to file petitions of objection without affixing any court-fee stamp. These were decided in the same way as the *badars* or objections recorded by the *muharrir*.

433. During preliminary attestation the *muharrir* was required to obtain, if this had not been already done, the signature of

Signing of *khatians*.

both landlord and tenant to every *khatian*, and to sign it himself in token of its having been duly read out and explained. The Assistant Settlement Officer at the time of final attestation was further required to initial the entries of rent and status.

This should have provided an ample safe guard against defective or careless attestation, but unfortunately in the early days of attestation many *khatians* were passed by *muharrirs* without the signatures of the parties, and the final attestation was done by stamping with a facsimile seal. This use of seals is a great saving in mechanical labour, and could have done no harm if the Assistant Settlement Officer never allowed the *khatian* to be stamped until every one had been read out and every objection disposed of. I am afraid however that this was not always the case, and the seal often meant very little.

After the rules of 1893-94 were framed, the use of facsimile seals was discontinued in most circles.

The original rule as to the initialling of corrections was that it should be done by the *muharrir* or *munsarim*, the idea being that where there were many corrections the record should then be fair copied. In the rules of 1893-94 the Assistant Settlement Officer was required to himself initial every correction in the *khatian* and *khassra*. The rule was subsequently rescinded as regard the *khassra*, but the Assistant Settlement Officer continued to be responsible for the attestation of all mistakes in the *khatian*. In practice, however, only corrections of rent and status were initialled by the Assistant Settlement Officer, all others being checked and initialled by a head *muharrir*.

434. After attestation, records were returned to the Survey Department, who entered the totals of the area columns of the

Completion of record by Survey Department.

khassra in a form known as the *milan khassra* or a shorter form known as the *mot khassra* and prepared a statement of cropped areas, they also corrected the original sheet map and its trace, and corrected the *khassra* in accordance with the reports of the *amins* attached to the attestation camp for the formation of new fields or division of old ones.

In 1894 the preparation of statistics after attestation was transferred from the Survey to the Settlement Department, and in 1895, the survey being complete the corrections of traces and *khassras* were made entirely in the Settlement camp.

435. In January 1893 the examination by Mr. Baroda Churn Mitra of a number of records of the Serai and Chaubiskud,

The re-attestation in Puri and Cuttack.

Rahang, Kodhar, and Gop Circles of Puri disclosed so many errors and omissions in the attestation that it was held to be necessary to completely revise the attestation before beginning the settlement of fair rents.

The nature of the errors brought to light was very various, but the following is a list of the most prominent defects of the early work :—

- (1) The inclusion in one and the same *khatian* of lands held under different proprietors.
- (2) The omission to ascertain the existing rent of a holding.
- (3) The omission to give effect to orders on the dispute lists.
- (4) The postponement of petitions for future disposal.
- (5) The absence of the Assistant Settlement Officer's signature on the records.
- (6) The absence of any record of the attestation proceedings.
- (7) The confusion of status; revenue-free and revenue-paying lands, paying fixed and variable rents, all being entered in one *khatian*.
- (8) Failure to demarcate and prepare separate *khatians* for *tahsilalahidas*.

There has been much controversial discussion as to the cause of and responsibility for these defects. It appears to me that the state of the records may chiefly be attributed to the bad *khanapuri*, the inexperience of officers and the praise awarded to large outturns. The *khatian* forms were not suitable. The postponement of correction of records by vernacular-knowing *muharrirs* according to orders passed in English from the field season to recess was also a great source of error.

Be this as it may, the result was that practically all the records of the Puri District and so much of Cuttack as had been attested before the middle of 1893 had to be re-attested or revised. The work was begun in both Districts in 1895-96 and half-way through the season special rules were framed to simplify and expedite it; much of the elaborate comparison of last settlement areas and rents that characterised the attestation of 1894-95 being stopped, and simple directions given for the utilisation of the old forms in place of re-copying. How this revision was combined with the settlement of fair rents will be told in a different chapter.* What it cost it is not easy to estimate; roughly, 15 lakhs of plots in Puri and 10 lakhs in Cuttack had to be revised. Revision and fair rent work combined cost about Rs. 1,000 per 10,000 fields, revision alone about Rs. 1,000 for 20,000 fields, or about Rs. 1,25,000 for the revision of 25 lakhs of plots. Some of this work would, however, have had in any case to be done owing to the lapse of time, so we may reduce the estimate for actual revision to one lakh besides what it has cost, owing to the consequent postponement of the realization of the new revenue.

436. When attestation first began, the Assistant Settlement Officers were engaged in the twofold work of inspecting the *khanapuri* and supervising attestation, and progress was alarmingly slow.

Mr. Finucane, when he visited the Province in February 1892, found that less than 10,000 plots a month were being attested, and recorded his opinion that 1,000 plots per working day was a more proper outturn.

The officers engaged on the work do not seem to have understood the conditions under which such an outturn was possible; for we find that in April one officer attested over 39,000 plots, while two officers in another circle attested 47,000 plots in addition to repairing soil maps. In May five officers attested over 207,000 plots or an average of 41,000 each.

Next year, under the revised rules there was again a falling off, but in January 1893 the average outturn was over 30,000 plots per officer, and in February one officer showed 4,193 plots as attested in a single day. In 1893-94 the average outturn per officer was only 8,019 plots per month, but in Balasore it was 12,860 plots against only 8,921 in Cuttack. It is difficult to account for this very small outturn; partly it was due to the very inaccurate *khanapuri* on which the officers were working in Cuttack and partly to an almost excessive striving after perfection, e.g., the elaborate comparison of last settlement and present settlement areas, the reconstruction of revenue survey villages, and the initialling of every correction in the record by the Assistant Settlement Officer himself. After the visit of His Honour Sir Charles Elliott, in 1894, all superfluous refinements were done away with, and with more experience and more systematic arrangements of the work, the average outturn for 1894-95 came to 19,418 plots per month.

* Cap. XVIII, paragraph 461, and App. C, Part VII.

CHAPTER XVIII.

SETTLEMENT OF RENTS.

437. In order that the land revenue of the temporarily-settled estates should be equitably assessed, that the public

Introduction. burthens should be equalized, and that Government should obtain its fair share of the increased wealth of the country with the least possible loss to the landed proprietors, it was necessary to have a complete record of the rents payable to zamindars and of the value of the land for which no rent was actually being paid.

So much could have been done under the provisions of Regulation VII of 1822, but a good deal more was found to be necessary. Many tenants had been holding at rents fixed for the term of settlement, many at very low rents, and it was clearly right that both these classes should be made to contribute towards the increase to be demanded in the revenue. This principle had so clearly been recognised that under section 104 (2) of the Bengal Tenancy Act it was imperative to settle fair rents for all tenants in all cases in which it was proposed to revise the land revenue.

438. In a note of the 3rd February 1891 Mr. Finucane, in recommending that for this and other reasons Chapter X of the Bengal Tenancy Act should be extended to

Principles of assessment, 1891.

Orissa, wrote as follows:—

"It would be premature now to discuss the principles on which settlement should be made. It will probably be found that the rents of the *pahi* raiyats are as high as the land can afford to bear, and that they may be left undisturbed.

"The rents of *thani* raiyats, which, under the terms of last settlement, ought to have remained unaltered for the past sixty years, will, as a matter of course, have to be now enhanced, if they have not in fact been enhanced during the currency of the existing settlement. It is not easy to lay down *a priori* the principles on which such enhancements should be made.

"The full enhancement which may be demandable on the ground of rise in prices cannot, it is probable, be taken, because the rents fixed for *thani* raiyats at last settlement were higher than the competition rents demanded from *pahi* raiyats.

"Neither can the rents of *thani* raiyats be fixed on the principle of raising them to those now paid by *pahi* raiyats. A middle course will have to be followed. The question is one regarding which the Settlement Officer should ascertain facts and ask for orders before finally adopting any principle of enhancement."

The general impression appears to have been that rents would be enhanced up to the "prevailing rate," as defined in the Bengal Tenancy Act, and Mr. Reily, early in 1891, issued to all Assistant Settlement Officers instructions for the preparation of soil maps, really rate maps. The system, its attendant difficulties, and the possible alternatives are so clearly set forth by Mr. Finucane in his notes of July 1891 that I cannot do better than quote what he says:—

"When the attestation of a number of contiguous villages is done, the Assistant Settlement Officer goes over the village lands with maps and records in his hands, and divides the whole village into blocks or *skats* of land. These blocks are pointed out by the raiyats and zamindars as being blocks recognised by them, which are said to pay the same rate of rent.

"The Assistant Settlement Officer marks off these blocks on the maps by drawing a line round the boundary of the block, each of which is coloured differently. The rate of rent, where there is a generally prevailing uniform rate, is also noted on the map.

"The Assistant Settlement Officer then extracts the fields belonging to each tenant in each block, and calculates what the rental would be on the area of the holding, at what may be called the block rate.

"Having worked out the rental of each holding in this way the Assistant Settlement Officer is supposed to compare the rental so arrived at with the rental actually paid, as already stated, by the parties and recorded by him, and if he finds that the actual rent paid is much less than the rent arrived at in the manner above described, he next proceeds to consider whether the rent should be enhanced on the ground that the tenant is paying at less than the prevailing rate. If he thinks that there are *prima facie* grounds for supposing that the rent ought to be enhanced, he, before proceeding to enhance it, calls on the raiyat to state the previous history of the holding and to show whether there is any reason for his being allowed to hold at less than the prevailing rates.

"This is the procedure described by Mr. Reily as being that which he proposed to follow, and has followed to this extent, that the attestation has been done in the manner described of 167 villages.

"The existing rentals of these villages have been recorded and the village lands have been split up into blocks, but the subsequent operation of extracting the area of the fields belonging to each raiyat in the several blocks, applying the block rates to these areas, working out the rental in this way and comparing it with the actual rental, has not been gone through.

"I examined the blocks or *chaks* into which the only one village in Outtack, of which the records were available, had been split up, and had the rates actually paid marked on the fields of each block.

"The result was that in a village of 62 acres there are four blocks and thirteen different rates. In other villages it will, Mr. Reilly thinks, be found, as he has found in a pargana of Puri, that there is greater uniformity of rates, that in fact there will be practically one uniform rate for a whole block.

"It is obvious that the system of splitting up villages into blocks in the manner described has one great advantage, in that it renders it necessary for the Assistant Settlement Officer to walk or ride through every village, or, as Mr. Reilly says, to 'go over every inch of the ground,' and thus enables him to note facts of interest regarding the village lands; but whether the system of splitting up the village into *chaks* will help very materially in the settlement of rents will very largely depend on the question of facts, is there, or is there not, a uniform rate of rent paid generally for the lands of the block? If there be a uniform rate, or anything like a uniform rate, then the system enables the Settlement Officer to see at a glance which of the tenants are paying at less than that rate, and also enables him to call on such tenants to show why their rents should not be enhanced up to the prevailing rate. But if it be found that there is not a uniform rate paid generally for the whole block, or for

blocks and by extracting the areas belonging to each holding, cannot be worked out by the application of a prevailing rate to the areas of land belonging to each holding in each block, if there be no prevailing rate.

"The procedure is obviously a very elaborate and thorough one, and it must, I fear, add considerably to the cost of settlement. Mr. Reilly is unable to say what the cost will be on the system above described. Babu Chaku Lall Sircar says he thinks the expense will be double of what it would be if the villages were not split up in blocks.

"The only alternative procedure which might be adopted would be to have the attestation of holdings made and existing rents recorded, as is now done, and then to make out a list of the tenants, showing the area of land of each class in each holding, and the amount of the present rent.

"When on looking over the list it is found that any particular tenant is paying less rent than is generally paid for the same area, he might be asked why he is paying less, and if he alleges that it is because the land he holds is of inferior quality to that for which the higher rent is paid, his particular fields might be noted on the map, and the Assistant Settlement Officer might go on the spot and ascertain whether these particular fields are really inferior to those for which the higher rent is paid.

"The effect would be that the Assistant Settlement Officer's enquiry on the ground would be limited to the particular holdings which, from an examination of the *terij*, appear to be paying an unduly low rent."

439. For more than a year all Assistant Settlement Officers continued to combine with the work of attestation and inspection of *khanapuri*, the preparation of rate maps and the collection of all the miscellaneous information required for assessment at the end of that time.

Mr. Nathan, who had all along been working in Kotdes, in the Puri District, wrote:—

"The system of preparing soil maps, as originally attempted, is not applicable to Orissa. The villagers are not able to point out with any degree of accuracy or certainty definite tracts of land bearing a uniform rent, and therefore the attempt to classify soils by the aid of present rates of rent, as stated by landholders and cultivators, has not been altogether successful."

He proposed, however, to substitute for it, not Mr. Finucane's alternative scheme of working solely on existing rents, but a system of classification of land according to the crop grown, and, following out this plan, made an experimental assessment of 24 villages of Kotdes.

Experimental assessment of 440. Briefly the principles of his assessment of Kotdes. were—

- (1) To ascertain the rate of rent paid in each village for lands growing a particular crop; this he called the "prevailing rate." When different rates were found in different blocks belonging to the same class, he formulated the following rule of practice for the determination of the prevailing rate: Arrange the rates cor-

responding to a particular class of soil in order of descending magnitude; against each write the *pahi* area over which the rate obtains. By trial find the area highest on the scale, the sum of which with the sum of all areas lower on the scale is greater than the sum of all areas higher on the scale.

- (2) To ascertain the average of prevailing rates paid for lands of a particular class in a group of similar villages: this was the "guiding rate."
- (3) All rents primarily to be raised up to the prevailing or the guiding rate, whichever was less.
- (4) The maximum limit of enhancement on the ground of rise in prices to be, in the case of rents fixed for the term of settlement, 100 per cent.
- (5) In the case of *pahi* raiyats whose new rent, according to the above rules, would be more than Rs. 10, a deduction to be made from the above enhancement in proportion to the rise of rent rates during the term of settlement.
- (6) In the case of tenants paying at privileged rates *bazyafidars* where the rent to be fixed was Rs. 5 or over the limit of enhancement, to be 200 per cent., or Rs. 5, whichever was greater.
- (7) In the absence of special reasons, the existing rent to be assumed not to be more than the fair rent.

Thus there were two methods of enhancement, either up to the prevailing rate under sections 30 and 31 of the Bengal Tenancy Act, subject to limitation by the guiding rate; or, on the ground of rise in prices, subject to the limitation of the guiding rate and to rules (4) and (5) above.

The results of this experiment were submitted by Mr. Nathan with a complete report dealing with the whole question of settlement of rents and assessment of revenue*.

It was pointed out that, equitable and fair though the rents calculated under this system might be, it was still necessary to settle them in the manner provided for the trial of civil suits, and neither Mr. Nathan nor the Director saw any way of doing this without a prohibitive waste of time and money, excluding the expenditure on such legal proceedings.

Mr. Nathan estimated the cost of settlement of rents under his scheme at three annas per acre.

4+1. No final orders were at the time passed on the proposals, but

Mr. Finucane† pointed out that the cost of Mr. Nathan's scheme was prohibitive, that legally it was unsound, in that the so-called prevailing rates were not such as the Civil Courts would recognise, while, in order to enhance on the ground of rise in prices, it was necessary to show when a rent was fixed. He proposed that for the next two years the work of the Revenue Officers should be practically confined to ascertaining existing rents or status.

That they should assume the rents of *pahi* raiyats to be fair and equitable as they stood and should take no action of their own motion to alter them.

That the rents of *thani* raiyats should be fixed about 25 per cent. lower than the average incidence of *pahi* rents in the village, basing all enhancements on the "rise in prices."

If the rents so calculated were agreed to they would be settled; if not, it would remain for the Assistant Settlement Officer to put on record evidence of the rise in prices and any other points raised before proceeding to enhance the rents according to law.

The Lieutenant-Governor, Sir Charles Elliott, recorded his general agreement with these suggestions, while still thinking some simple form of soil map essential to an equitable settlement of rents with reference to the agricultural value of land.

* Appendix A (2) (a).

† Appendix A (2) (c). Note of 14th December 1893.

442. The next attempt to settle rents was made by Mr. Taylor in the year 1894-95 in a block of 41 villages in the immediate neighbourhood of Cuttack.

Mr. Taylor's experiment—assessment in Bakrabad and Dalijora.

These formed a far more promising area for experiments in soil mapping than Pargana Kotdes. In the latter the rents were all lump rents, the proprietors were notoriously ignorant of the details of their estate management, and the classification of crops and soils appears to have been unusually complicated. In Kodinda and Bakrabad Mr. Taylor found most of the estates in the hands of descendants of the proprietors who had held them at the last settlement, and a very large area belonging to a shrewd and capable samindar whose papers were in excellent order and showed clearly his classification of the land, which was generally well known to the tenants also.

In this area Mr. Taylor, following Mr. Nathan's lead, divided up the villages into blocks according to the crop grown. He personally checked the rates and then caused a detailed rent-roll "*chakbandi* sheet," showing the area and class and rate of rent for every plot in each holding to be prepared. On this sheet the former area and rent were entered and the new rent at the "prevailing rates" calculated.

Existing rents were not reduced except for special reasons, such as deterioration or diluvion of the land, raiyat rents were never more than doubled; Mr. Taylor afterwards proposed to limit the enhancement to 50 per cent. except in the case of purely peppercorn rents. *Baryaftidars* were assessed at full rates subject to a limit of enhancement of 200 per cent.

Where tenants were willing to accept, Mr. Taylor recorded their acceptance; where they did not appear, no steps were taken to enforce attendance.

Objections taken at the time were summarily disposed of and tenants were allowed a month in which to put in formal petitions for revision.

On the whole the experiment was successful. The tenants understood and appreciated the procedure and were willing enough to accept even large enhancements, and I am of opinion that the rents then fixed were very fair. Certainly the procedure removed many glaring inequalities, though perhaps the rates as a whole were in some cases a little high and in others a little low.

The drawbacks to the system were that it depended for its legality on enhancement up to a "prevailing rate," while the rates taken were in many cases "averages," and it would have certainly been difficult to prove that they were "prevailing rates" within the meaning of the definition in the Bengal Tenancy Act.

Further, the system entailed a lot of local inspection and lengthy calculations, so that it would have been costly and there would have been a considerable liability to error. Accordingly Mr. Taylor next took up the settlement of rents in *Killa Dalijora* to the north of Cuttack containing 100 villages, and contented himself with preparing a rough soil map used only for reference in case of objection.

Rents of raiyats were left untouched except for the assessments of lands held in excess of that shown in the zamindar's papers. In a few cases only where the rental shown by the zamindar was less than at the last settlement a general enhancement of *pahi* and *thani* rents was made on the ground of rise in prices.

Lands held by the proprietors, or tenants paying at privileged rates were assessed at the "village rate," i.e., at the average rate paid in the village for all *pahi* lands or for all *pahi* and *thani* if the latter was higher.

The enhancement of rents of *baryaftidars* was subjected to a limit of 200 per cent.

The assessment so made was a very lenient one and was readily accepted by the tenants, but the proceedings were never confirmed and the rents were eventually resettled in 1897.

443. Meanwhile an attempt had been made to tabulate figures for the

Rate Reports of 1892.

Province to show the area and rent under each class of tenants and the increase in cultivated area and in assets since the last settlement. Figures for seven Parganas of Puri were compiled in 1894, and the results were published in the annual report, but were considered too incomplete to be of any real use.

In 1895 rate reports were written by four officers for the circles of Jajpur, Balubisi, Utikan and Asureswar, but the figures have never been reviewed or put to any practical use.

444. In the spring of 1895, I proposed rents on the basis of a soil map in 14 villages of Balasore, and as the result of my experience submitted in my letter No. 1075 of 5th May 1895 proposals for the settlement of fair rents, of which the following is an abstract:—

Experimental assessment in Balasore.

- (1) The *kanungo* being duly empowered by a commission issued to him should prepare a soil map and enter the rates.
- (2) The soil map having been open to inspection for three days the Assistant Settlement Officer should dispose of disputes and objections and confirm or modify the rates.
- (3) In fixing the rates the guiding principle should be to make new rents, area for area, conform as nearly as possible to existing rents.
- (4) *Pahi* rents when less than the deduced rent, to be proposed at the latter amount, but not to be more than doubled except for excess area.
- (5) *Pahi* rents to be levelled down to the prevailing rates only in case of loss of more than 10 per cent. of the former area or for special reasons.
- (6) *Thani* rents to be enhanced by not more than 33 per cent. on the ground of rise in prices.
- (7) *Basyafti* rents to be enhanced up to full rates subject to a limit of 300 per cent. besides the assessment of excess area at full rates. The limit of enhancement to be 200 per cent. for substantial rents.

In proposing this rule for *basyaftidars*, I gave it as my personal opinion that a settlement at half rates would be more equitable.

Working on this system I estimated that one Assistant Settlement Officer should be able to dispose of 8,000 or 10,000 plots in a month or 2,000 tenants at a cost of nearly 3 annas per acre.

445. During the rains of 1895 figures were tabulated and preliminary assessment reports written by Babu Sri Gopal Bhattacharjya in the Kapari, Adda, Tappa Parsand and Bhateswar sub-circles, and in the following cold weather the settlement of fair rents was begun by Babus Sri Gopal Bhattacharjya, Prasana Kumar Banerji, Romosh Chandra Das and Giris Chandra Dutt.

They proposed rents in November and December to 13,805 tenants and the results were discussed by me in my letter No. 320 of the 10th January 1896 to the Director of Land Records and Agriculture.

The procedure adopted was based on Mr. Finucane's Note of the 14th December 1893, existing rents of tenants other than the privileged tenants being assumed to be fair, and the standard with which rents were to be compared being the "village rate" or the average incidence of rents paid by occupancy raiyats as found by dividing the total rent by the total area after exclusion of lands held rent free or at privileged rates.

Rents of all classes of tenants when found to be less than 90 per cent. of the product of the area held and the "village rate" were in general raised, some remission being allowed where cause was shown.

A compassionate reduction of one-third from the rent calculated at the village rate was suggested in the case of the privileged tenants.

Briefly the result of this experiment was to raise the nominal existing rental by a third, two-fifths of the increase being contributed by *basyaftidars*. Occupancy raiyats' rents were in the aggregate raised by 10 per cent., no distinction being made between *thani* and *pahi*.

The bulk of the work, however, was done in tracts where in recent years there had been a large increase of cultivation very little of which had been assessed by zamindars. For this reason assets was raised by one-third, a large proportion of the increase being derived from rents imposed upon excess areas,

446. Certain rules were framed by me and submitted with the report

No. 320 already referred to. To discuss these

First Fair Rent Rules of 1896. rules I was summoned to Calcutta and returned with instructions to take charge of the whole of Orissa (Mr. Maude, the Settlement Officer of Cuttack and Puri having gone on leave). I was directed to start settlement of rents at once in all three districts.

In March Mr. Stevens, the Senior Member of the Board, and Mr. Lyon, then officiating as Director of Land Records, visited Orissa. They drew up the first set of detailed rules for the settlement of fair rents.

It was decided that:—

- (1) The rents of *pahi*, settled and occupancy raiyats and non-occupancy raiyats, were presumably fair and should not be interfered with except on the application of landlord and tenant.
- (2) That for difference of measurement an allowance of 10 per cent. of the former area should be made and any further excess found assessed at the village rate, i.e., at the average rate paid by cash-paying occupancy raiyats under the zamindar, as found by dividing the total recorded rental by the survey* area of their holdings.
- (3) That, subject to a maximum enhancement of 100 per cent. the rents of *thani* raiyats should be proposed at a rate which was the mean of the village rate and of the average rate paid by *thani* raiyats; this rate to be called the *mean rate*, provided that the rent of no *thani* raiyat already greater than the product of the mean rate and the survey area or within 10 per cent. of such product should be altered.
- (4) That the rents of *baayaftidars* paying nominal full rates should ordinarily be raised by 50 per cent. or in special cases by 100 per cent., provided that the rent so settled should not exceed two-third of the product of the village rate and the cultivated area.
- (5) That the rent of *baayaftidars* holding at half-rates should ordinarily be enhanced by 200 per cent. and in special cases by 300 per cent., provided that the rent so settled should not exceed two-third of the product of the village rate and the cultivated area.
- (6) That lands in the possession of proprietors should be assessed at the village rate, a grace concession being made in all deserving cases.
- (7) That invalid grants made by the zamindars should not be resumed but assessed for revenue, leaving the zamindars to take steps for their assessment.
- (8) That where additional rents were taken on account of the cultivation of specially valuable crops, such additional amount should not be included in the fair rent settled, but separately entered as a temporary *de facto* payment.

Such were the lines on which the settlement of rents began in Orissa generally. They depended for their validity on the general presumption enunciated in Section 27 of the Bengal Tenancy Act that the rent payable for the time being by an occupancy raiyat is fair and equitable, and on the liability of tenants to pay additional rent for land held by them in excess of the area for which rent has been previously payable by them. (Section 52 of the Bengal Tenancy Act.)

For the rest it was expected that the tenants would accept the rents proposed, and that if they did not it could be proved that the enhancements were justified by the rise in prices.

The system did not pretend to perfection, and it was obvious that it would leave untouched many inequalities that under a more elaborate method, such as that tried by Mr. Nathan in Kotdes, would have been removed.

* By survey area is meant the area of a holding as determined by the Survey Department.

On the other hand it was very justly claimed for it that it was simple; that it involved the least possible disturbance of the *status quo*; that on the whole the existing *pahi* rents might rightly be assumed to be fair, and that the settled rents would consequently be fair also; that it avoided the great danger inseparable from all systems of soil mapping of inequalities in assessment due to the idiosyncrasies of individual officers; and lastly that it was open to any person dissatisfied with the rent proposed to apply for the settlement of a different rent and adduce formal evidence in support of his contentions.

447. Naturally the scheme provoked a good deal of criticism both from the District Officers and from some of the leading men of the native community, but they had nothing better to propose in its place and with some slight modification, the rules were accepted by the Local Government in their letter No. 400 T.R. of the 6th June 1896, and recommended to the approval of the Government of India in letter No. 766 T.R. of the 15th September 1896.

In a letter No. 4136—4010, dated the 3rd November 1896,* the Government of India suggested further consideration of some of the points raised in the correspondence, and these were accordingly discussed in a conference held at Cuttack on the 25th and 26th January 1897, His Honour the Lieutenant-Governor being in the Chair, and the Senior Member of the Board and the Director as well as all the local officers being present.†

Alterations were made in the rules with a view to ensure that unduly low rents should not escape enhancement. A modification originally proposed by Mr. Thomson in the rules for assessment of *thani* rents was accepted, i.e., it was decided that where the average incidence of the *thani* rents was higher than or within $12\frac{1}{2}$ per cent. of the village rate, *thani* rents in such village should be altered only for alteration in area or because some particular rent was exceptionally low, and where the difference came to more than $12\frac{1}{2}$ per cent. all *thani* rents should be raised by half the percentage.

It was also decided to discontinue the separation of the additional rent taken for specially valuable crops from the normal rent; and to record a specially high rent only in cases where it was justified by the quality of the soil. With these and a few other minor alterations the rules were again submitted by the Government of Bengal with their letter No. 238 T.R. of the 12th May 1897 to the Government of India.

Some exception was taken by the Government of India to the rules for the settlement of *pahi* and *thani* rents and further reports‡ were called for from the local officers. On receipt of these reports§ the Government of Bengal expressed themselves satisfied that the rents settled were not unduly low, and the rules eventually received the approval of the Secretary of State, communicated in his despatch|| No. 20 of the 3rd February 1898 and are printed as Appendix C to this report.

I shall now proceed to consider in detail the most important points in the rules and correspondence, especially the treatment of the several classes of tenants found in Orissa.

448. In settling rents the revenue officer was, under Section 107 of the Bengal Tenancy Act, required to follow the procedure laid down in the Code of Civil Procedure for the trial of suits, subject only to such rules as the Local Government might make.

The rule framed in this behalf, Rule 24, Chapter VI of the rules framed under the Bengal Tenancy Act, runs as follows:—

“When (1) a landlord or tenant applies for the settlement of a fair rent, or (2) in any case in which a revenue officer engaged in the settlement of the land revenue proposes to alter an existing rent, notice shall be given in the following manner to persons interested:—

“(1) In the case of an application made by the landlord or tenant, notice shall be served on every person interested in the application, together with a copy of the application or extract therefrom or summary thereof so far as the application concerns such person.

“Board’s instruction under Rule 24 (1):

“If only one person is interested in the application a copy should be served on him; if more than one, an extract containing such particulars as concern him, should ordinarily be

* Appendix A, No. 9.

† Appendix A, No. 10.

‡ Appendix A, No. 12.

§ Appendix A, Nos. 13 to 16.

|| Appendix A, No. 17.

served on each person. If a summary only is given, the revenue officer should satisfy himself that such summary contains all that it is material for the parties interested to be informed of.

"(2) In the case of a settlement of the land revenue, a copy of the proceeding prescribed in Rule 23 shall be served by proclamation and beat of drum, and by posting it in the presence of not less than two persons in some conspicuous place in the village comprising the lands under settlement. Proof of service of such notice at least one week previous to the date fixed for settlement of fair rents shall be sufficient notice to all persons concerned."

The first preliminary then to settlement of rents was the preparation for each estate and tenure in the village of a schedule showing the name of each tenant, the area of his holding according to the survey papers, the rent paid, and the area for which it was being paid.

From these data the village rate and *thani* rate were extracted and the rents calculated and entered in the column for proposed rents.

Then having satisfied himself that the record was complete and that a month's notice had been given inviting parties to file applications for settlement, the Assistant Settlement Officer fixed a date for proposal of rents and issued a notice accordingly. On such date he read out the proposed rent to the assembled villagers and after listening to their objections and making such modifications as he found necessary in his original proposals recorded the fact of their acceptance.

If any tenant whose rent it was proposed to alter was absent a notice was served upon him informing him of the amount of new rent and fixing a date for his appearance. Unless he made any objection the rent proposed was settled on such adjourned date.

In only a very few cases in the whole Province tenants refused to accept the rents ultimately proposed to them and in those instances evidence was recorded and a rent settled according to law.

The proceedings were closed by the record of a formal judgment recapitulating the general grounds on which rent had been altered and declaring the new rents entered in the schedules to be fair and equitable.

449. With the passing of Act III of 1898 a change was introduced.

Act III (B.C.) of 1898.

Before beginning the settlement of rents the attested records were published in the village. Then the tenants were sent for and rents proposed and settled as before, but objections were now more summarily dealt with at this stage.

The rent-roll or schedule of old and new rents was then published in the village and the tenant allowed a month in which to prefer objections. These being disposed of, the roll was submitted to the Settlement Officer for confirmation before the new rents were entered in the *khatahs*.

The later system certainly entailed more work on the Settlement Officer, but it enabled him to exercise a far more effective supervision, and also gave the tenants a better chance of getting their objections properly disposed of.

450. It was for a long time uncertain whether Section 101 (2) (d) of the

Act V (B.C.) of 1894.

Tenancy Act would apply before the date of expiry of the old Settlement, the wording used being "where a settlement of revenue is being made."

To clear up this doubt and also a difficulty as to the date from which the new rents should take effect, Act V of 1894 was passed.

This Act corrected the wording of Section 101 (2) (d) to "where a settlement of revenue is to be or is being made," and further provided that the new rents should become payable from the date on which the new settlement of land revenue came into force.

451. It has been shown in paragraph 435 that in 1896 the state of the

Combination of re-attestation with settlement of rents.

records was such that in the whole of the District of Puri and in one-fourth of Cuttack, it was necessary to go over the whole attestation again, and as settlement of rents was also going on the question was raised how the two processes could be combined so as to economise time and power.

In Puri in the rains of 1896 the experiment was first tried of letting one officer revise and attest the record and then pass it on to another, who fixed the village rate, sent for the tenants, and proposed and settled rents.

The great impediment to any closer combination of the two processes was the sequence prescribed in the Government Rules under the Tenancy Act, which required that, attestation having been completed, at least a week's notice should be given of the date for settlement of rents, and that a month's time should be allowed to all parties to apply for settlement of rents; and to comply with this rule, and yet prevent too great a waste of time, the following procedure was suggested by Mr. Lyon and worked out during my visits to the Puri and Khurda camps in October-November 1896.*

The preliminary attestation of the village being complete and objections disposed of, a schedule of existing areas and rents was drawn up, the village rate extracted, and the new rents calculated according to rule.

On the date fixed for attestation the new rents were also read out to the tenants and their acceptances, where given, recorded. They were then informed that on a date at least one week ahead the rents would be settled and a notice to that effect was published in the village.

On the date so fixed rents were again read out, the acceptances of former absentees recorded, and objections disposed of and the new rents entered as settled.

The records were however not published until the expiration of a month from the date on which they had been finally attested.

The great merit of this procedure was that it gave the tenants a whole week to think over the rents proposed to them and ensured nearly all objections being preferred before the record was published in the village.

After the passing of Act III (B.C.) of 1898 the reading out of the rents at the time of re-attestation was in many instances discontinued as causing delay in the publication of the record, and as being unnecessary in view of the subsequent publication in the village of the rent-roll.

452. It was at first assumed that, except in the villages requiring re-attestation, the records were sufficiently perfect to allow of rents being settled at once without further corrections. Accordingly, so far as possible, schedules were prepared at headquarters in the recess of 1896, and issued with the records to officers about to settle fair rents.

Experience however soon showed this to have been a great mistake. It answered fairly in the records attested in 1895 and 1896, but in the case of those attested in previous years the result was that numerous corrections had to be made in the schedules which were so cut about as to become almost illegible.

More and more liberty had to be allowed to officers to correct mistakes before beginning to settle rents and in the season of 1897-98 the general rule was to make an informal revision of the record explaining all *khatians* to the tenants before proposing rents.

The records were a good deal altered at this stage, but schedules were only allowed to be re-copied where this was absolutely necessary.

453. In paragraph 11 of his letter No. 455 of the 11th February 1896 with which he recommended for approval the experimental settlement of rents in Balasore, Mr. W. C. Macpherson, the Director of Land Records, suggested that unless the signatures of tenants were obtained they might hereafter deny having accepted the rents, and that the mere record of the fact of acceptance might not be held by the special judge to be sufficient, and he recommended a change in the law whereby a tenant should not be allowed to subsequently object to a rent unless he within a reasonable time filed a written objection before the Assistant Settlement Officer.

The Board however and the Government of Bengal held that there was no reason to apprehend that the special judges would not be satisfied with a note of acceptance and did not consider any change in the law to be necessary.

Some attempt was made when beginning work in 1896 to obtain the signatures of tenants in token of their acceptance of the settled rents, but the villager writes so extremely deliberately that the waste of time was prohibitive and all that was done was to record on the schedule opposite the tenant's name "Accepts," and later "Appears and accepts," together with the name of the substitute if the raiyat did not come himself.

Genuine acceptances in the early stages of the work were very difficult to get. Our rapid and somewhat summary method did not suit the slow understanding and love of detail of the Uriya and the *bazyastidars* in particular were not at that time convinced that their opposition to enhancement was hopeless.

In the end however every tenant was induced to give some sort of consent to the proceedings; and as the work went on and the people got more accustomed to our procedure and realised how easy our terms were and how little they gained by objecting, acceptances were obtained with no great difficulty.

Naturally it was not easy to get a man to definitely express his acquiescence in an enhancement even though he knew it to be fair, and the Board of Revenue in their letter No. 486A, dated 23rd April 1897, held that it was unreasonable to expect that every tenant who meant to accept would say so in so many words, and that regard should be had to the man's demeanour.

The number of appeals against fair rent decisions was very small and such as were brought were in contested cases in which the Assistant Settlement Officer had in the first instance recorded evidence.

The general opinion among the officers engaged in fair rent work appears to have been that the system of basing the settlement on acceptances was a mistake; that such acceptances might mean that the man really was willing to pay the rent proposed, or that he could not argue the matter with the Assistant Officer, or that he was really afraid lest he should draw down upon himself the anger of the all-powerful Government.

They would have had some system, such as that suggested by Mr. Macpherson in his letter of February 1896, whereby rents should be proposed to tenants and their objections listened to, but acceptances only taken in the case of alterations; and that where such acceptance was not given the Assistant Settlement Officer should record the grounds on which he made the alteration and settle the rent accordingly, leaving it to the tenant to put in a written petition to have such rent modified.

Practically this is very much what is done under section 104 A (1) (d) of Act III (B.C.) of 1898.

Rents in Orissa have, since that introduction of that Act, been proposed, and acceptances recorded, under section 104A (1) (d), but where after allowing any reasonable concession the Assistant Settlement Officer has failed to obtain an acceptance, he has under section 104 A (1) (d) retained or altered the rent, recording the grounds of the alteration, if any, and has left the tenant if still dissatisfied to put in a written objection under section 104 E, i.e., after draft publication of the rent-roll.

In the first code of rules it was provided that acceptances need only be recorded where rents were altered. Rents it was proposed to maintain were read out to the tenant and settled as fair unless a specific application for reduction or enhancement was made.

Subsequently, in accordance with the law, every rent was read out and settled whether alteration was made or not.

454. The present cultivators or raiyats of Orissa are generally divided into two classes: *Thani* meaning resident, and

Pahi raiyats.

Pahi meaning non-resident. Of the latter Mr.

Ricketts, the Collector of Balasore, wrote in answer to the question of the Board of Revenue in 1831:—

“*Pahee* raiyats are those tilling land in villages in which they do not reside. The rates paid by them are, as before mentioned, lower than the *thane* rates. *Pahee* raiyats are to be found who for a lengthened period have tilled the same land *pahee* at one unvarying *jama*. But no length of possession is considered to give a right, and should any person propose to settle in the village and take as *thane* the land held *pahee*, the *pahee* raiyat must give way.”

The settlement of 1837 left their rights unchanged, except in the few Parganas in which *pattas* were given by Mr. Wilkinson and Mr. Hunter, and for the most part there was not even a record of the rents payable by individual raiyats. The grant of *pattas* was definitely forbidden by paragraph 8, Government order No. 1199 of 22nd August 1837, and thereafter the aggregate rent payable for all the *pahi* land under cultivation was taken as the basis of assessment to revenue, and the raiyat left to make his own terms with the zamindar.

Act X of 1859 gave rights of occupancy to such raiyats as had held the same land for 12 years, but the landlords continued to enhance rents periodically, though, except in Balasore, their power of ousting tenants without recourse to the Courts became much more limited.

The rights of *pahi* raiyats and their relations with their landlords are dealt with fully in another chapter;* here it must suffice to say that in the present proceedings the provisions of the Bengal Tenancy Act have been applied and they have been treated as having the rights of settled, or occupancy or non-occupancy raiyats under that Act.

It has been assumed that their rents are competition rents† and that they should not ordinarily be altered except for the assessment of excess area or because they were found to be lower by a third than the village rate, without any reason for the difference.

It may here be noted that the term *pahi* is applied only to raiyats paying directly to the zamindars or proprietary tenure-holders of the village, and not to tenants holding under the resident *lakhirajdars* and petty tenure-holders, who, by the custom of the country, were all regarded as “under raiyats” without rights.

On the whole, the enhancement of their rents has been as follows:—

	Former rent. Rs.	New rent. Rs.	Percentage of enhancement.
Cuttack	11,40,500	11,95,700	4·9
Puri	2,38,500	2,52,500	5·9
Balasore	6,04,600	6,59,400	8·4
Total	19,83,600	21,07,600	6·2

These figures exclude the *pahi* lands included in mixed *thani-pahi* holdings, for which another Rs. 2,60,000 should be added. Adjusting the figures Mr. Kingsford found in Balasore that the total *pahi* enhancements were from Rs. 7,23,500 to Rs. 7,84,300 or 8·4 per cent., *i.e.*, the same as for pure *pahi*.

455. Under section 52 of the Bengal Tenancy Act VIII of 1885 every tenant was liable to pay additional rent for all land proved by measurement to be in excess of the area for which rent had been previously paid by him, and in determining the amount to be added to the rent the Court was to have regard to the rents payable by tenants of the same class for lands of a similar description and with similar advantages in the vicinity.

The area found by measurement appeared on the face of the record; the area for which rent had been previously paid was found in the zamindar's papers and attested. To the latter area in order to cover possible errors due to difference of measurement 10 per cent. was added and the amount so obtained deducted from the survey area; the remainder, if exceeding $\cdot 4$ of an acre, was assessed at the village rate, *i.e.*, an amount equal to the product of the remainder, and the village rate was proposed to the tenant as additional rent, but was in many cases reduced for specific reasons, *e.g.*, inferiority of soil. In a few cases it was raised on application of the landlord on the ground of special fertility of the soil.

This rule as to excess area was the subject of much discussion. It was on the one hand pointed out that in Wards' Estates it was the practice not to assess any excess amounts less than 20 per cent. on the former area, while on the other hand some of the local officers were in favour of only allowing one *gunth* in the *man*, *i.e.*, 4 per cent. as the margin of error in the case of *thani* and other holdings known to have been accurately measured.

Eventually as a compromise Rule 10 of Appendix C was adopted providing:—

- (i) That 10 per cent. should be the normal allowance.
- (ii) That in special cases the allowance might on the application of the landlord and tenants be reduced to 4 per cent.
- (iii) That no excess of less than $\cdot 04$ of an acre should be assessed.

* Chapter XI, paragraph 324, &c.

† Settlement Officer to Commissioner No. 2770, dated 31st December 1897, paragraph 19. Appendix A (13).

The only zamindars who moved in the matter were those of Utikan, who claimed to, have the allowance for error reduced to 4 per cent. in the case of all tenants in their zamindari.

In Madhupur special arrangements were made and are described in the chapter* dealing with the settlement of that estate.

Ordinarily no attempt was made to identify the particular plot of land which constituted the excess, but the tenants often knew, and if it was inferior usually claimed and got a small reduction.

Where either the *khanapuri* was bad or the landlord's papers inaccurate, the tenants would in many cases deny the existence of any excess. If they did so they were on payment of annas 11 a day allowed the services of an *amin* to re-measure the land.

Sometimes it would be found that the measurement of the field was actually wrong and in that case the fee deposited for the enquiry was refunded; more often the tenant had had recorded in his name a bit of some one else's land, or of fallow which he did not want and gave up, but generally the survey papers were found to be practically correct, and the objection groundless, or due to an error in the zamindar's papers, or to a misunderstanding on the part of the raiyat.

The percentage of assessments on excess area varied very much from circle to circle and from district to district. The percentage was greatest in Balasore and least in Puri. It appears to me that the percentage of enhancement to a certain extent varies according to the quality of the *khanapuri* and attestation. In Balasore we worked on good *khanapuri* and well-attested records, great pains having been taken to record in the village, or at the camp close by, the area for which the tenant was paying rent. In Puri and parts of Cuttack this had not been done and in many cases the zamindars borrowed the areas contained in our records when they were called on to file rent-rolls at the re-attestation stage. At any rate in Balasore there was no re-attestation. Cuttack was partially re-attested and Puri entirely so. It must be added however that there is a larger area for extension of cultivation in Balasore than elsewhere.

The assessment of excess lands in Orissa has throughout been based on the rates generally payable for similar lands in the vicinity; the alternative of a proportionate increase on the existing rental provided by section 6 of Act III (B.C.) of 1898 has rarely been used, except in the case of homestead lands.

456. The rules as at first framed contained no provisions for the reduction of rents. This omission was subsequently rectified and it was provided :

Reduction of rent.

That where a tenant's lands as found by measurement were less by 10 per cent. than the area for which he was paying rent, he should receive a reduction of his rent proportionate to the diminution in the area of his holding.†

This was a sufficient provision for cases of dispossession or diluvion, but tenants could also claim a reduction as of right for deterioration of the soil of their holdings by deposit of sand or other specific cause. (Section 38, Act VIII of 1885.) Such cases were met with in Parganas Kodinda, Olas, Saibir, Kalamatia of district Cuttack, and to some extent throughout the whole of the unprotected area. Purubduai and Oldhar in Puri had suffered especially great injury owing to the Adlabad breach in the Bhargabi river which it has been finally decided to leave open. Such cases as these had to be dealt with each on its own merits, and much was necessarily left to the discretion of the Circle Officers; but rules showing the general principle on which the reductions should be calculated were drawn up and issued early in 1897, and the case of Purubduai and Oldhar was specially reported to the Board.

As a rule in such cases soil maps showing the areas affected were prepared and the block rates ascertained, but instead of calculating the fair rents directly on such rates the decrease in the annual value was calculated for each holding and the amount deducted from the former rent. The rules are printed in Appendix C, Part VI.

A third case was where the existing rent was unduly high, but there was no specific ground on which the tenant could claim a reduction. Such rents

* Paragraph 603.

† Appendix C, Part I.

were occasionally found where petty landlords in a densely-populated area rack-rented their tenants, but as the Local Government had not thought fit to vest any of the officers engaged in settling rents with powers under section 112(1)(b) of the Tenancy Act they were unable to redress the injustice and inequality complained of.

It is true that very high rents were the exception and not the rule, and that without soil maps or rates it would have been difficult to be certain which rents were too high, but I think it is a matter for grave regret that in a settlement where rents found to be obviously low were unhesitatingly enhanced, the Settlement Officer should have been powerless to reduce a rent which he knew to be oppressively high.

The result of this inability to equalise rents has been to enable the landlord who rack-rents his tenants to make a double gain, firstly in that he extorts more from his tenantry, and secondly that, owing to the great increase in assets and for the security of the public revenue, it has been necessary to leave with him a larger share of his collections. It is my opinion however that cases of this nature are rare and officers entrusted with the power to reduce rents would very rarely have been called upon to exercise them.

457. The criterion by which the fairness of all rents in a village has, under the summary procedure adopted in Orissa, to be judged is the average "village rate," i.e., the average incidence of competition rents.

It was not at first at all clear how this village rate was to be found, what was the area on which the rent should be held to be payable, nor what classes of tenants should be excluded.

In the rules of the experimental assessment in Balasore it was, where possible, to be ascertained by dividing the sum of the attested rents of *pahi* raiyats and of the *thani-pahi* raiyats paying lump competition rents by the sum of the areas of their holdings as shown in the zamindar's papers.

However, after a full discussion at which the Senior Member of the Board, Mr. (now Sir) C. C. Stevens, and Messrs. Lyon, Thomson and myself were present, it was resolved that the village rate should be based on present survey areas,* and should be calculated by dividing the sum of the cash rents paid by the settled and occupancy *pahi* raiyats in each revenue-paying estate in the village by the sum of the present survey areas.

Before doing this it was the practice to deduct from both sides of the sum the areas and rents of lands growing special crops as well as those paying produce rents.

Further provision was made for special cases (*vide* Rule 5, Appendix C, Part I. and four alternative methods for ascertaining the village rate were prescribed—

- (1) To take the average of the village rates of three or four adjacent villages.
- (2) To take the rate as deduced from the principal estates only of the village.
- (3) To make two rates for different parts of the village.
- (4) To neglect figures for estates in which there was obviously collusive and low record of rents.

The first provision was very frequently resorted to either where the *pahi* lands in the village were insufficient to form a safe basis for a rate, or where, owing to the very marked difference between the rate as deduced from the recorded rents of the village in question and those of the surrounding villages with similar advantages, there was reason to believe the rents to be incorrectly recorded.

(2) The second provision was used where, as was often the case, either owing to the inferiority of the soil or the absence of the proprietors, rents in the "*tuhsilalahida*" portions of a village were much below the general average.

(3) The third provision was very rarely used indeed, but was intended to provide for cases where there was a very well-defined distinction between *jalu* and *p'il*, or rice and riverside lands. It was based on the case of *mauza*

* Survey area means the area entered in the record prepared by the Survey Department.

Adda, Pargana Adda Rupiya, in Balasore, where there was one block of ordinary rice land and another of valuable *pal* lands paying widely different rates.

In all cases such deviations from rule were subject to the approval of the Settlement Officer or his covenanted assistants in charge of districts, and were carefully supervised.

458. By the custom of the country the collectors of revenue under the Hindu, Moghul, and Mahratta régime, held in part payment for their services certain lands free of

assessment. In the case of the superior officers their lands were known as *khanabari* (homesteads) and *nankar* (bread giving) lands, and in the case of the *muqaddams*, *sarbarahkars*, and other village headmen as *watan* or *pitrali* (ancestral) or *heta* (i.e., *jagir*) lands.

It is not very clear what rights in these lands were recognised, but there can be no doubt but that the village headmen always claimed to retain their *pitrali* even on sale for arrears of revenue.

This right the British Government did not recognise, as will appear from the following quotation from a letter of the Sadar Board of Revenue, dated the 8th November 1805, addressed to the Collector of Cuttack, in connection with a proposal of the *padhans* of Lembai to make over the rights connected with the payment of revenue to one Nilmoni Chaudhuri :—

"It must be explained to the *padhans* that their *nankar* lands in common with the other land will be considered as forming part of the security of Government for the public revenue, and that in case it is necessary to have recourse to an attachment or to a sale of lands such *nankar* property will be attached and sold."

At the last Settlement all such lands were nominally assessed at full rates under the designation of *khudkash*, *nijot*, or *khāndr* except small areas of homestead (*khāndbāri*) lands exempted from assessment.

No right of occupancy was at that time recognised in any but *thani* raiyats, and Act X of 1859, while extending rights of occupancy to all raiyats who had held the same land for 12 years, exempted from this rule *khāndr* and *nijot* lands let for a term or year by year. Practically down to 1894 the record of *nijot* land was made in accordance with local custom and Act X of 1859, no distinction being observed between the lands of zamindars and those of proprietary tenure-holders.

The question what should and what should not be considered to be *nijot* was answered in the Director's inspection note of February 1892 in which it is provided that :—

"Under *nijot* is to be entered—(1) land held as *nijot* at the last Settlement cultivated by the proprietor or his assignee; (2) land shewn as *nijot* at the last Settlement, if specifically let to raiyats as *nijot*."

In his report on Kotdes Mr. Nathan (paragraph 20) pointed out that, differing from Section 6 of Act X of 1859, Section 116 of the Bengal Tenancy Act protected only the private lands of the proprietors and not those of any class of tenure-holders, and suggested the necessity of special legislation. The Board considered this view of the law to be correct, but thought the matter too small for legislation, and Government agreed.

Chapter XI of the Tenancy Act has, however, not been extended to Orissa and the rights of *muqaddams*, *sarbarahkars* and other village tenure-holders have been scrupulously observed in preparing our record.

In the Attestation Rules of 1895 it was laid down as follows :—

"*Nijot* lands are defined in Section 120 of the Tenancy Act. This Section has not been extended to Orissa where the question of *nijot* is still governed by Section 6 of Act X of 1859; but the spirit of the Tenancy Act definition must be followed with the exception of clause (a) which prescribes that *nijot* must have been cultivated by the proprietor for 12 continuous years before the passing of this Act."

"The real guide to whether land is *nijot* or not will be the custom of the country by which *nijot* is held to be the last settlement *nijot* with the addition of such lands as the zamindar may have reclaimed from waste, either by his own plough or by letting in *bhagchar* to a raiyat and for which no cash rent has been paid. To this area must be applied the provision of Sections 6 and 7, Act X of 1859, i.e., land can only be protected against the accrual of occupancy rights where it has been let out on lease for a term or from year to year."

All lands in the immediate possession of the proprietor or sub-proprietor and cultivated by his servants and not recognised as *nijot* have been recorded

as *nij-chás*. By the custom of the country *nijjot* included also the lands cultivated by a tenant paying produce rents, but applying the provisions of the Tenancy Act. Such tenants have in this settlement been classed as occupancy or non-occupancy raiyats.

In the Assessment Rules of 1896 it was proposed to value all these lands, *nijjot* and *nij-chas*, at the "village rate," but to allow the proprietors a deduction not exceeding 25 per cent. of the gross valuation on all lands *bonâ fide* cultivated by themselves or their servants and not obtained by improperly ousting raiyats.

This concession was based on the analogy of Rule 53 of the North-Western Provinces' Board's Rules, which allows a deduction of 25 per cent. on all 'sir' land actually and in good faith cultivated by the proprietors, or by hired labour at their expense, and the adoption of this rule was approved by the Local Government.*

The Government of India in their letter No. ⁴¹⁸⁶/₄₀₋₁₀, dated the 3rd November 1896, pointed out that a hard and fast rule such as that proposed might prove inconvenient and suggested that it would be sufficient to issue instructions to value *sir* lands leniently.

This suggestion was adopted and the final rule on the subject (†) runs thus:—

"The Assistant Settlement Officer will make the normal valuation for *nijjot* and *nij-chas* at the village rate, but should so far as possible, at the time of settling fair rents, assess *nijjot* and *nij-chas* lands at their actual valuation (letting value) rather than at average rates."

In making proposals for the assessment of revenue it was at first the practice to reduce the increase of revenue, in cases of apparent hardship, by allowing deduction from the valuation of the proprietors' lands, but Mr. Commissioner Cooke, in submitting for the orders of the Board of Revenue the settlement reports on 13 estates of Pargana Randia Orgara, expressed his disapproval of the under-valuation of *nij-chás* lands, and the Board of Revenue in their letter No. 21A of the 18th January, 1898, accepted the Commissioner's views.

Thenceforward no reductions have been allowed in any valuations of *nijjot* or *nij-chás* except where the proprietors could show it to exceed the fair letting value of the land.

459. *Nijjot* lands are commonly sublet to tenants who usually pay half the produce as rent. A certain number of these

Tenants of *nijjot*.

tenants, though by no means all, have been recorded in our *khatians*, and their existing rents have been settled as fair and equitable, neither tenants nor landlords ever applying for alteration.

Nij-chás lands when leased out cease to be *nij-chas*, but by custom the zamindar may let them on produce rents without losing his right to immediate possession. In this settlement that custom has not been recognised and many fields claimed by the proprietors as *nij-chas* have been recorded as raiyati.

On the other hand many fields actually let on produce rents are recorded as *nij-chas*, the tenants finding no place in our record and not claiming any.

460. By "special" crops are meant those crops for the cultivation of which an extra rent is paid in addition to that paid for

Special crops.

the land when growing the staple crops of the

Province.

Mr. Maude included under this head two crops only, the *pán* or "piper betel," the leaves of which are used by the people to wrap round the preparation of the lime and betel-nut that they habitually chew, and sugarcane. To these I would add three more—tobacco, cotton and jute.

Pán is grown in raised gardens of from one-fiftieth to a quarter of an acre. At the last Settlement these gardens were assessed at from Rs. 25 to Rs. 75 per acre, and though the life of a garden is only from 15 to 20 years, these high rates continued to be paid in some villages by the *tháni* raiyats down to the present settlement.

Pahi tenants sometimes got leases for the term of life of a garden at a similarly high rate, but generally the rents were liable to revision annually according to the area of the garden found in their possession and to its condition, very young and very old gardens paying less than the full rates.

* Government to Board No. 400T.R., dated the 6th June 1896. † Rule 17, Appendix C.

Sugarcane is grown on ordinary rice land, generally near the homestead. It is a very paying crop, but entails much labour for its cultivation and cannot be grown on the same land two years in succession. In some parts, but by no means in all, it was the practice to take an extra rent from *pahi* raiyats when they grew it. Another feature of sugarcane cultivation was the practice of exchange of fields, locally known as *akhubadali*, whereby a tenant desirous of growing sugarcane but having no suitable land temporarily exchanged one field with a neighbour and grew the crop on that. Each continued to pay his ordinary rent, but the actual grower of the sugarcane made also an extra payment to the zamindar.

Cotton is on much the same footing with sugarcane, but more dependant on the fertility of the soil.

Tobacco, a more valuable crop than either, is entirely dependant on silt deposits for its growth, and the high and variable rents taken may be accounted for by the varying depth and quality of the silt deposited from year to year.

The four cases have these features in common that in all the rent is higher than that paid for similar lands growing other crops in the neighbourhood; and the rent is annually determined by the addition of a certain sum proportional to the area actually growing the crop to the ordinary or normal rent of the holdings. To some extent this additional rent was a tax on industry, but in the case of tobacco and cotton it was chiefly due to the special qualities of the soil, and in a sense this appears to be the case with *pán* also, as only in a few villages can good leaves be produced. At first it was proposed in all these cases to arbitrarily ascertain the normal rent of the holding, recording the balance as a temporary payment terminable on ceasing to grow the special crop.

Exception to this rule was taken by Government* on the ground that it was opposed to the policy laid down in Lord William Bentinck's Minute of 1833 and that it must act as a check on industry and discourage cultivation of the more valuable crops. Two alternatives were suggested, the first that of settling as fair the whole rent actually paid, the second that of settling the normal rent only and treating all further collections as illegal *ábwdbs*.

The first alternative had the sanction of custom and of the practice in the last settlement, but was open to the objection that these rents could not in fact be always collected every year; the second proposal was in conformity with imperial policy, but it was in the first place very difficult to say how much of the extra rent should be treated as a tax on industry and moreover there was found to be no legal means of reducing the existing rent.

Eventually a compromise was effected and—

- (i) The rent actually paid was settled in full.
- (ii) If a custom of yearly alteration was found to exist, a note of the fact was made in the *khatian*.
- (iii) Where there was any fear that the whole amount could not be collected in full, or where the extra payments were considered not to be warranted by the fertility of the soil, only such amount was carried into the assets of the estate as the Settlement Officer considered should be demanded with reference to the capability of the land.

417. *Tháni* † raiyats, literally 'raiayats of the place,' were those who had homes in the village.

Tháni raiyats.

They were in a manner proprietors of their holdings and from the earliest times had been protected against ejectment or enhancement of their rents beyond the recognised amount. To them in the last settlement leases‡ were given, showing the land held by them, the amount free of rent, and the rent payable on the balance. This rent was fixed for the term of settlement and had in most cases been unaltered up to the time when we began to settle rents.

In the present settlement, the *tháni* right of every tenant who could prove that he held *tháni* land by inheritance or purchase from the holders at the last settlement was recorded in the *khatians*, no attempt being made to identify the

* Letter No. 4007 R., dated 6th June 1896

† See paragraph 319 *supra*.

(‡) *Kul-patta*, i.e., ink leases.

land plot by plot with the old settlement numbers unless the zamindar objected to the entry of any of the land as *tháni*. A tenant forfeited his claim to recognition as *tháni* by accepting a reduction or enhancement of rent by the zamindar or by abandoning his holding, as many did in the great famine of 1866, being only re-admitted as *pahi*.

Apart from these restrictions *tháni* lands had been freely bought and sold (subject generally to the payment of a large premium to the zamindar), so that *tháni* lands were sometimes found in possession of non-resident raiyats. Such men have generally been recognised as settled *tháni* raiyats of the village, but the practice varied in different circles and at different periods, and I have found cases, as in Balubisi, in which the *tháni* right was not recognised by the zamindar and has been disallowed. There were no authoritative rules on this point, but in the large majority of cases the right of the purchaser to hold as a *tháni* raiyat has been recognised.

The right to create new *tháni* tenancies since the last settlement has nowhere been admitted; in places the zamindar had given tenants leases of land as *tháni*, or had practically recognised the *tháni* right by allowing raiyats their homestead free of rent, but such holdings have been classed as *pahi* and the holders as ordinary settled raiyats, their *minha* land being assessed to rent or revenue.

It was decided at the visit of Mr. (now Sir) C. C. Stevens and Mr. Lyon to Orissa in March 1896 that some consideration should be shown to the *tháni* raiyats and that their rents should be fixed somewhat lower than those of the ordinary occupancy raiyats. Accordingly the limit of enhancement was fixed at a rate which should be the mean of that formerly paid by the *tháni* and that paid by the *pahi* raiyats. It was pointed out however that the result of the rule was to exempt from all enhancement the rents paid for the more valuable *tháni* lands, which were generally the best lands in the village, and towards the close of 1896 the rule was modified*, and it was provided that where the *tháni* rate, i.e., the average incidence, of existing *tháni* rents, was more than 12½ per cent. below the village rate, all *tháni* rents in the village might be enhanced by half the percentage of difference. This rule depended for its equity on the assumption that *tháni* rents were fixed at the last settlement on the basis of a soil classification and that what were then the best lands are generally still the best.

These assumptions open up a very large question which I shall have to consider more fully when analysing the rents now settled; here I only propose to deal with the question whether in fact the rents fixed were based upon the productive power of the soil. I would first quote from a letter from Mr. Commissioner Ricketts to the Sadar Board of Revenue (No. 1435 of the 23rd September 1886):—

“ Paragraph 11.—Actual payments, by which I mean the rates actually paid, are of course considerably influenced by the nature and situation of the soil. I have not, therefore, in directing actual payments to be made the basis of settlements, prohibited the assessment of lands at rates suited to their nature and situation which Mr. Mills in his report on the settlement of Uaveli Cuttack says I have done; but the nature and situation of the soil are only two of an infinity of causes operating to increase and decrease the amount of rent the land can pay, and if we give up ourselves exclusively to those two guides to assessment and do not go wrong, it is my belief, luck, not learning, will have helped us on.”

“ Paragraph 15.—In those Parganas of Cuttack which have from time immemorial paid a considerable revenue, that is, those Parganas which from natural advantages were first cultivated, in every village are to be found *tháni* raiyats paying different rates for lands in every respect the same. This all allow, and within the last eight or nine years, during which from repeated calamities of season and other more remote causes the resources of the agricultural classes have considerably deteriorated, this inequality of assessment has become very general.”

“ The *kudimi* raiyats, those who from industry or from having possessed the means of combating with their reverse of fortune have maintained their ground generally, are found to pay the highest, while the latest settlers pay the lowest rates.”

With reference to this report the Board in a letter to the Government of Bengal† gave a summary of the opinions expressed by the Commissioner and Collectors of Orissa in the following terms:—

“ Paragraph 91.—Mr. Wilkinson observes that his principle in settlement making has been to assess lands according to their capabilities; and if he found a raiyat holding land

* Rule 8, Appendix C, Part 1.

† Board to Government No. 15 of 30th October 1886, paragraphs 91 to 96.

in other respects of a similar description at a lower rate than his neighbour with reference to all circumstances, he either raised the one or reduced the other; that, in short, he did not consider that actual payments should be invariably assumed as the basis of settlements; that the equalisation of the public demand (*vide* preamble to Regulation VII., 1822), the chief desideratum in settlements, would be defeated if merely actual payments were invariably made the basis of settlements."

"Paragraph 92.—Mr. Mills may be considered to hold the same doctrine with this difference, that he would take the rates actually paid by the tenantry and, where he found unequal rates to prevail, he would distribute the aggregate amount with the assistance of the people on the whole of the lands, with reference to their relative class. In short, he would remedy irregularities in rates as an essential part of the settlement. And he argues that this is the more necessary, since such irregularities—that is, unusually high rates—are mostly occasioned by the circumstance of the *thāni* raiyats cultivating *lakhraj* lands at low rates. Hence, as two-thirds of the rent-free tenures would fall below the Resumption Law, the cultivators of the *khalisa* lands would never be able to continue paying the same rates, if in the revision of settlement the rates on such *khalisa* lands were not made suitable to their productiveness."

Mr. Mills' opinion, Collector,
Central Division, Cuttack.

"Paragraph 93.—Mr. Repton is of opinion that the basis of settlement should be the average rent actually realised by zamindars during previous years. He observes that all the *thāni* raiyats are much over-assessed, and, as remarked by Mr. Mills, are only able to pay their rent by cultivating *lakhraj* lands at an extremely low *jama*; that, if it is considered necessary to give *pattas* to the *thāni* raiyats at fixed rates for a fixed period, it will then be necessary to enter more into detail to assess the lands as equitably as possible and to equalize the varieties of rate for the same land."

Mr. Repton's opinion, Collector,
Northern Division, Cuttack.

"Paragraph 94.—Mr. Ewart would listen to objections either from the zamindar or raiyat, would be guided by the existing state of things as proved by investigation, and, where he found adjoining lands in a village generally paying the same rates, yet some paying higher and some paying lower, he would make them correspond, or, where he did not find adjoining lands paying similar rates, he would adopt actual payment as his basis."

Mr. Ewart's opinion, Officiating
Deputy Collector of Southern Division,
Cuttack.

"Paragraph 95.—Mr. Ricketts would be guided by actual payments. He would make actual payments the groundwork of assessment, to be altered only where the rate paid by any individual raiyats might appear to be lower than is paid by others from favour or other unsuitable cause, satisfactorily demonstrable."

Mr. Commissioner Ricketts' opinion,
paragraph 5.

"Paragraph 96.—With reference to any case in which it may be shown that the *kudim* raiyats can no longer pay the assessment imposed on them, he would admit of a reduction, but he would not throw the amount of that reduction upon other raiyats less able to pay the load, although cultivating lands of a similar description, but assessed at a lower than the average rate."

Having thus summed up the views held by the local officials, the Board, recorded their own opinion:—

"Thus it is necessary for the Settling Officer to collect the following heads of information:—

"1st.—The very best information he can obtain by every available means, such as *patticari's* village accounts, &c., to ascertain what is the rent actually received by every proprietor from every tenant in his village.

"2nd.—A classification of the several descriptions of soils and their respective rates of rent with reference to their produce and situation in an average of years.

"3rd.—Enquiries into and comparison of the rates of land of the same quality in adjacent places and villages to a greater or less extent as his judgment or opportunities lead him to make.

"Paragraph 107.—Having obtained all these data, he then proceeds to determine to the best of his power what is the rent actually paid upon a consideration of the whole evidence before him; and when he finds cases in which, in reference to these data, the rate said to have been actually paid is irregular, high or low, he makes particular inquiries into the causes of it and either upholds the alleged rate of rent or increases or reduces it, as in his judgment appears right and equitable."

Such were the principles on which the settlement was based, and though the actual application varied according as a particular officer attached more or less weight to rates or to existing payments, yet, as far as my experience goes, neither was neglected.

The class of crop grown was entered by the *kanungs* at the time of measurement. The Deputy Collector checked these entries and ascertained by local enquiry the rates paid for the several classes. These rates were compared with those in the zamindar's rent-roll and raised or reduced as might be

necessary. The rates for the remainder of the village were then calculated so as to work up to what the Deputy Collector considered to be the true or proper total of the collections.

I think that it may safely be said that the rents so settled for the *tháni* raiyats were within any one estate proportional to the value of the land, though there was often great disparity between the rates in neighbouring estates. The first assumption on which the rule for the enhancement of *tháni* rents in the present settlement was based is therefore justifiable. As regards the assumption that rents which 50 years ago were adjusted to the value of the crop grown still continued to have any relation to it, the question depends so much on the physical characteristics of the village that it would be difficult to generalise. As a rule good low *sarad* lands continued to be valuable, and high or sandy lands to be poor, but in areas much subject to flood or where canal irrigation had been introduced, the relative value of lands was liable to considerable change and Assistant Settlement Officers were warned to be careful, and given the option of reverting to the former method of enhancement if they found it more applicable.

462. It often happened that a *tháni* raiyat held also *pahi* lands; indeed, so long ago as 1831 Mr. Ricketts writing from Balasore noticed the existence of a class of "*Tháni-pahi* tenants" holding both *tháni* and *pahi* lands. After the Settlement of 1837 this became much more common. *Tháni* raiyats took up *pahi* land at comparatively low rates—this was one of their privileges—and very often paid the rent of both *tháni* and *pahi* lands together. As a rule a tenant knew his *tháni* land and rent, and it was separately shown in the zamindar's papers, but this was not always the case, and in many Parganas, especially in Balasore, the *tháni-pahi* lands had become indistinguishable. The rules for *tháni-pahi* raiyats were framed especially with a view to dealing with the latter class, the principle being that it should be ascertained how much of the land and rent was, properly speaking, *tháni* and that so much of the rent should be liable to enhancement in the same manner as pure *tháni* lands, the rest being treated as *pahi*; but for the purpose of the assessment of excess area the whole of the lands, *tháni* and *pahi*, should be treated as a single holding.

The difficulty in working the rule was the very variable circumstances of the holdings to which it had to be applied; they might be *tháni* and *pahi* lands really distinct but entered in one *khatim*; or they might be so far merged in one another that a single rent was paid though the lands were separate and recognised as such by landlord and tenant; or again the *tháni* right might exist but, on paper, lands and rent alike have merged into a single holding. Where records were re-attested the *tháni* and *pahi* lands were, where really separate, entered in separate *khatians*, leaving only those which were indistinguishable as 'mixed' holdings. These latter might, I think, have been treated as *pahi*, for that is what they were to all intents so long as the tenant could not say that any definite field was his *tháni*. Indeed in some estates the zamindars succeeded in getting all tenants of this class entered as *pahi* on the ground that the *tháni* rights had long lapsed.

The treatment of *tháni* raiyats' rents in this settlement is shown in the following table:—

DISTRICT.	AT LAST SETTLEMENT.		AT PRESENT SETTLEMENT.							
	<i>Tháni.</i>		<i>Tháni</i>				<i>Tháni-pahi.</i>			
	Area	Rent.	Area.	Existing rent.	Settled rent.	Enhancement per cent.	Area.	Existing rent.	Settled rent.	Enhancement per cent.
	Acres.	Ra.	Acres.	Ra.	Ra.		Acres.	Ra.	Ra.	
Cuttack	133,700	3,78,700	41,700	1,14,000	1,20,900	6	84,200	2,13,800	2,25,800	5.4
Puri	98,900	2,01,800	35,200	64,800	68,900	6.8	63,000	1,18,000	1,22,900	4.
Balasore	107,100	1,85,000	11,700	19,800	21,700	9.6	111,800	1,79,100	1,91,600	6.9
Total	337,700	7,65,300	88,600	1,98,400	2,11,400	6.6	259,000	5,10,900	5,39,700	5.7

* See paragraph 323.

463. By Section 48 of the Bengal Tenancy Act it is provided that the landlord of a raiyat holding at a money rent shall not be entitled to recover rent exceeding the rent which he himself pays by more than the following percentage of the same, viz. :—

- (1) When the rent payable by the under-raiyat is payable under a registered lease or agreement, 50 per cent.
 (2) In any other case, 25 per cent.

It is also laid down in the Tenancy Act* that in every case in which a settlement of fair rents is being or about to be made, the Revenue Officer shall settle fair and equitable rents for tenant of every class. The law officers of Government being consulted held :—

- (i) That a Revenue Officer acting under Section 104 (2), read with Section 101 (2) (d) of the Act, is bound to settle the rents of under-raiyats where a settlement of rents is being made.†
 (ii) That in enhancing or reducing the rents of under-raiyats the Revenue Officer should be guided by the principles laid down in the Act for the enhancement or reduction of rents of occupancy and non-occupancy raiyats according as the under-raiyats have or have not occupancy right; such enhancement to be subject to the provisions of Section 48 of the Act.
 (iii) That the existing rents of under-raiyats must be considered to be fair and equitable until the contrary is proved, and that the contrary would not be proved by showing that existing rent is in excess of the amount recoverable under section 48 of the Bengal Tenancy Act.‡

These decisions are embodied in Rule 26 of the Fair Rent Rules printed in Appendix C, and the universal practice has been to alter no under-raiyat's rent, except on the application of landlord or tenant.

464. A full account of the working of the Resumption Laws will be found in Chapter XXIII., and a very brief account of the origin of the *bazyafli* tenures will here suffice.§

At the last Settlement all claims to hold land free of revenue were investigated and in the event of resumption grants over 75 acres were made into separate estates, those of less extent being included in the revenue-paying estates|| and assessed at half or at full rates according as the grantee could or could not prove uninterrupted possession since the conquest¶, the zamindars and *muqaddams*, if any, being allowed collection expenses only at 15 per cent. on the nett *jama* of tenures assessed at half-rates.

In one respect the rules were not always observed, viz., it was often the case that where the settlement of the *khalisa* lands of a *maurasi* village, or village held by a proprietary tenure-holder, preceded the resumption proceedings, as in *taluk* Raghunathpur and many large estates, the *bazyafli* holders were not made to pay through the *muqaddam*. In some of these cases the rents were however actually collected by the *muqaddams*, though they received no allowances for so doing.

The rules were interpreted with great leniency, no attempt being made to assess the lands at anything like the real rates paid for similar lands in the vicinity, so that instead of paying full-rates and half-rates the resumed lands were assessed at from a half to an eighth of their letting value; the average incidence of rent of those nominally settled at full-rates being fourteen annas and of these settled at half-rates seven annas per acre. The resumed lands assessed at full-rates known as *kamil bazyafli* (perfect resumed) or *pura jama bazyafli* (fully assessed resumed) comprised all resumed *jagirs* and the tenures of which the holders could not prove continuous possession since the conquest.

The rest were known as *nisfi* (half) or *dihajama* (half assessed) *bazyafli*.

In according their sanction to the rules of resumption the supreme Government had expressed a hope that these petty resumed tenures would, before the

* Section 104 and Section 104A of the Amended Act.

† Opinion of 27th November 1896.

‡ Opinion of 29th May 1896.

§ See paragraph 313.

|| Board to Commissioner, No. 542, dated 11th September 1833.

¶ Rule XIII. of rules of 1841.

expiry of the settlement, have become merged in the general raiyati lands of the Province.

To some extent this has been the case with the *pura jama bazyafli*, especially with the resumed *jagirs*, which were generally in the possession of men of low caste; but the lands assessed at half-rates belonged for the most part to Brahmans or to influential raiyats of the cultivating classes and have generally been preserved intact, as the following figures will show:—

	AREA RECORDED IN ACRES.	
	Last Settlement.	Present Settlement.
<i>Pura jama</i>	80,600	55,200
<i>Adha „</i>	221,300	232,400

The *bazyaflidars* received *pattas* at the last settlement, and for this reason especially have been able to preserve their status.

The question of enhancing the *bazyafli* rents was first raised in 1875 during the re-settlement of the Cuttack Town, when it was decided that the lands should be classified at the next lower rate in the scale of assessment to that under which they would naturally fall.

In a letter No. 20T.R. of the 24th April 1895 from the Government of Bengal to the Board of Revenue it was decided to treat the *bazyaflidars* as tenants and not as dependant *talugdars*, and the following principles were laid down for the assessment of their lands:—

- (1) That the rents settled for the *bazyaflidars'* lands should be included in the general assets or the revenue-paying estates to which they have been attached.
- (2) That the rents of the *bazyaflidars* should be enhanced on the same principles as may be applied in the case of raiyats and tenure-holders according as the *bazyaflidars* in each case may be recorded as a raiyat or tenure-holder, the enhancement being subject to a maximum of 200 per cent. or 150 per cent. over rents now paid by them when the rent is substantial.
- (3) That the privilege of transfer and of fixity of the rents for the term of settlement which the *bazyaflidars* enjoy at present should be maintained to them by an entry in the settlement records.
- (4) That *kamil bazyafli* raiyats having no right whatever to hold at privileged rates should be treated as *thani* raiyats (Government order No. 2604L.R. of 10th May 1894).

The last order appears to have been passed under a misapprehension of the terms on which the *kamildars* actually held; it being assumed that having been nominally assessed at full-rates their rents would be on a par with those of the *thani* raiyats, whereas in fact the average incidence was very much lower.

Following these principles it was in the first Assessment Rules of 1896 provided that the half-rents of *nisfi bazyafli* should be in the first place doubled and the full-rent so obtained should be ordinarily enhanced by 50 per cent. or if still very low by 100 per cent. *Kamil bazyafli* rents were ordinarily to be enhanced by 50 per cent. and if still very low by 100 per cent.

The enhanced rents of both *nisfi* and *kamil bazyafli* were subjected to a limit of two-thirds the product of the village rate and the cultivated area. No rent was to be assessed on the uncultivated lands and it was to be recorded that such lands would be liable to assessment if brought under cultivation on expiry of the settlement.

These rules on the whole worked well, and though at first it was found very difficult to get acceptances, yet after the *bazyaflidars* had been convinced that their rents were liable to enhancement and after a few objections had been disposed of by recording evidence and enhancing rents for rise in prices or on other grounds all general opposition ceased.

In a few instances the enhancement of rents of lands belonging to a village idol or to a Brahman of unusual sanctity was resented, but Assistant Settlement

Officers were encouraged to listen to such objections and allow most liberal terms.

The chief addition to the rules has been the permission to raise rents beyond the prescribed limits where the extension of cultivation since the last settlement was more than 50 per cent. The rule was rendered necessary by the very small areas assessed in some parganas at the last settlement, so that *bazyafidars* were now found to be holding large cultivated areas and only paying rent for a fraction of them. Several petitions have been received from the *bazyafidars* of the three districts protesting against the enhancement of their rents and have been reported on by the Settlement Officer. So far as their objections apply to the general principle of assessment the only relief which has ever been recommended by the Board of Revenue or Government was that of a progressive enhancement suggested in Mr. Toynbee's Note of 17th November 1896. This proposal was dropped in consideration of the petty nature and great number of the *bazyafi* holdings which rendered its practical application almost impossible.

Another class of objections to the enhancements in particular areas is more difficult to deal with as it is not easy when the assessment of a village is once finished to discover the reason that may have led to any unusual enhancement. It would be strange if in no case had any of the large staff of officers employed in settling rents been led by excess of zeal, for the interests of Government, to enhance some rents beyond the limits of prudence and equity, but as a general rule I can say with confidence that the rents are far below the competition rates for the class of land, and rarely indeed amount to more than one-half of what an occupancy riyat would pay. The enhancement of *bazyafi* rents resulting from the application of the rules work out as follows:—

	<i>Nisfi Bazyafi.</i>						<i>Kamil Bazyafi.</i>					
	No. of hold-ings.	Area.	Existing rent.	Settled rent.	Incl- dence per acre.	Enhance ment per cent.	No. of hold-ings.	Area.	Existing rent.	Settled rent.	Incl- dence	Increase per cent.
1	2	3							10	11	12	13
		Acres.	Rs.	Rs.				Acres.	Rs.	Rs.	Rs. A.	
Cuttack ...	88,800	84,800	35,700	1,08,200		780	28,600	22,500	19,400	30,000	1 6	55
Puri ...	36,400	59,400	33,100	67,300		108	5,400	6,500	6,100	8,200	1 4	34
Balasore ...	48,300	78,260	22,900	68,000		197	15,760	25,200	14,800	23,800	0 15	67

465. A very full account of the origin of the *kharida* tenure is given in paragraphs 53 to 57 of Mr. Stirling's Minute

Kharida tenures.

printed as an appendix on pages XXXIV to XXXVI of Mr. Toynbee's History of Orissa.

The name signifies simply 'bought,' and the tenure owes its existence to the practice by which *talukdars* and *muqaddams* were allowed to sell free of rent or at a quit rent patches of waste land, *banjar kharij jama*, subject to the approval of the *sadar kanungo* or the controller in the Revenue Department.

These tenures were of three classes:—

- (1) *Ma'dafi Kharida*, tenures excused payment of revenue.
- (2) *Tanki Kharida*, tenures subject to the payment of a *tanki* or quit rent.
- (3) *Sarbarahi Kharida*, subject to assessment of revenue.

The whole of the rights possessed by the alienator passed to the purchaser. Mr. Stirling indeed thinks that the right acquired was that of actual property in the soil, which was certainly not vested in the *talukdar* prior to the British conquest of Orissa.

At the last settlement the rights of *kharidars* and the treatment to be accorded to them were discussed in 1837, in connection with the settlement of *taluk* Malipur in the Cuttack District, in the correspondence ending with

Government letter No. 983 of the 27th June 1837. The conclusions arrived at in this correspondence may be summed up as follows:—

(1) Resident purchasers from zamindars acquired the same right of property as the zamindar and were to be called *kharidadars* of the first class.

(2) Resident purchasers from *muqaddams* or other dependent *talukdars* acquired the same right of property as was possessed by the vendor, and were to be called *kharidars* of the second class.

(3) Rents of *kharidadars* of the first class were to be fixed at full raiyati rates subject to a deduction of 30 per cent.

(4) Rents of *kharidadars* of the second class were to be fixed at full raiyati rates subject to a deduction of 20 per cent. They were to pay through the *muqaddams* to whom another 10 per cent. was to be given for expenses of collection.

(5) The zamindar was allowed for expenses of collection the difference between 30 per cent. and the full amount of the allowances on the raiyati assets of the estate.

Sometimes in case of *kharidadars* of the second class 15 per cent. was equally divided between *muqaddam* and *zamindar*.

(6) Recusant *kharidadars* of the first class were allowed 5 per cent. *malikana* and the zamindar was placed in possession of the land and received the full amount allowed on raiyati assets less 5 per cent.

(7) Recusant *kharidadars* of the second class forfeited all right to re-entry and got no *malikana*.

(8) These rules applied to such *kharidadars* as were not permitted to enter into separate engagement for the direct payment of revenue to Government, whether '*pursethi kharidadars*,' i.e., purchasers of whole villages or integral portions of villages, or *kharida jamabandis*, i.e., purchasers of specific plots of land.

Besides these two classes there were *mazkuri kharidagi* estates admitted under the Moghul or Marhatta Government to separate engagement for revenue especially the *kharidagi baze asamián* estates generally composed of scattered plots of land extending over a large number of villages and held by a large number of *kharidadars* all jointly responsible for the payment of the revenue, though only the most influential were recorded as *málguzárs*.

These were admitted to engage as proprietors, but when the estate had been sold for arrears of revenue they were treated as being of the second class only.

(9) *Mu'áfi kharida* tenures were treated in the same way as other revenue free grants, but on resumption the holders were given allowances as *kharidadars* of the first or second class accordingly as they had purchased their tenures from zamindars or *muqaddams*.

In the present settlement *kharida jamabandi* tenures have been treated as tenures under the Tenancy Act and have been assessed under Section 7 of that Act, a deduction being made from the gross assets of the tenure calculated at the percentage allowed to the *kharidadar* at the last settlement and the maximum limit of enhancement fixed at 200 per cent. or $\frac{2}{3}$ of the product of the village rate and the cultivated area, whichever is less.

By an entry in the record of rights the privilege of holding at a fixed rent for the term of settlement has been allowed.

Pursethi kharidadars have been treated as village sub-proprietors, and the amount to be paid by them fixed under the general rules for the assessment of revenue on proprietary tenures.

466. By the custom of the country, as indeed I believe of all Northern

Thani-minha.

India, the *tháni* or resident raiyats held their homesteads without payment of rent, this being one of the privileges which compensated them for the higher rates of rent that they had to pay.

These lands were at the last settlement exempted from assessment and recorded in the settlement papers and in the *pattas* given to the raiyats as *minha*, or 'deducted' from the assessed lands.

In a Government order No. 1183L.R. of 2nd March 1895 it was decided with regard to *thani* raiyats and *bazyastidars* :—

(1) That those who got their *gharbári* (house site and surrounding plots) *minha* (rent—free) at the last settlement should continue to hold them *minha*, and that those who did not should continue to pay rent for them.

(2) That the area of *minha* allowed to each raiyat at the last settlement should be deducted from the area belonging to him now to be assessed to rent.

(3) That in making this deduction a margin of about 10 per cent. should be allowed for differences of measurement. If, however, in any case the portion of a plot left after making the 10 per cent. allowance should not exceed one-tenth of an acre, or $2\frac{1}{2}$ *guntas*, the Revenue Officer dealing with the case might leave it *minha*, but if the area exceeded $2\frac{1}{2}$ *guntas*, it must not be left unassessed.

Minha lands had been by custom freely bought and sold, and sometimes the *minha* was now found in possession of a person possessing no other land in the village, and in other cases the land now classed as *minha* was not homestead at all but arable land. In dealing with such cases the orders of Government have been interpreted in their most liberal spirit, and no attempt has been made to confine the *minha* to particular plots or particular tenants, but wherever *thani-minha* was found in the last settlement papers and a title to that *minha* by purchase or inheritance was established by any claimant and the land identified, it was allowed *minha* without attempting to discover whether it was the same plot that was held *minha* at the last settlement.

467. The Government orders quoted applied to *bazyast* as well as to *thani minha*, but it is rare to find a *bazyastidar* holding his homestead free of assessment. *Bazyastli*

minha is more commonly waste land recorded in the last settlement as *minha nalayek kantabári jangal* (i.e., un-culturable thorny junglo) or in other similar terms, and is correctly described not as *minha* but as *mauqif jana*, i.e., suspended from assessment. By the Assessment Rules of this settlement so much of the land as has now been brought under cultivation has been assessed to rent; in the case of lands still lying waste the assessment has, as before, been suspended and a note made in the village judgments that it will be liable to assessment if brought under the plough at the next settlement.*

468. Not only raiyats but the proprietors and village sub-proprietors used to hold their houses free of rent and revenue. In

Minha-Khanabári.

their case the *khanabari* (house and homestead) was at the last settlement either confirmed as *minha* or resumed. Generally a large area was claimed and part was resumed and assessed as *khanabari bazyastli*.

These lands were often retained by the proprietors even when their estates were sold for arrears of revenue and formed generally the most valuable part of the proprietor's private lands.

It was at first proposed to assess all such lands, but by Government order No. 4009L.R. of the 21st August 1895, the privilege already granted to *thani* raiyats and *bazyastidars* was extended to resident proprietors and tenure-holders. *Khanabari* lands have generally in the present settlement been classed as *nijjol* and assessed at full rates; where the proprietors proved any land to be *minha* it was exempted from assessment, but the areas so exempted were very small.

469. Besides lands recorded in the papers of the last settlement three

kinds of rent-free grants by zamindars were commonly found in Orissa :—

Rent free grants by zamindars.

(1) *Zamindar-dia-minha*.—These were plots of land, mostly homestead, allowed by zamindars to a raiyat without payment of rent, and generally forming part of an occupancy holding.

(2) *Zamindar-dia niskar*, or *kam jima*.—These were grants rent free or at a nominal rent made to Brahmins or old servants and by the custom of the country generally tenable more or less at the pleasure of the donor.

(3) *Zamindar-dia-jagir*.—Grants of land to retainers, servants, and others in payment of service. The zamindars commonly give small plots of land free of rent to low caste labourers and in exchange requisition the holder's labour for the cultivation of *nij-chas*.

Mr. Nathan in his report on Kotdes, paragraph 23, proposed that such lands should be assessed at full rates and the rents added to the gross assets of the estate or tenure in which they were comprised. This proposal was approved by Government in their letter No. 2604, dated the 10th May 1894. At the visit of the Senior Member of the Board and the Director to Cuttack in March 1896, it was decided that no attempt should be made to assess to rent these grants, unless the zamindar or grantee applied, but that they should be valued and the amount of the valuation included in the gross assets of the estate.

The interests of the zamindar were protected by an entry in the *khatian* recording the circumstances in which he was entitled to resume and the amount of rent that might fairly be assessed.

At this time section 192 of the Bengal Tenancy Act was not in force, but in order to facilitate the resumption of these invalid grants on the application of the proprietors it was extended to Orissa by a notification of the 17th October 1896. No alteration was however made in the prescribed procedure until the end of 1897 when Mr. Macpherson, in a letter No. 2624S. of the 11th November 1897 to the Board of Revenue, pointed out that although section 192 only provided for assessment of grants when either the grantor or grantee applied, yet under section 104 (2) of the Act we were required to settle rents for all tenants in Orissa, and expressed his opinion that the latter section over-rode section 192 and that it was necessary to fix a fair rent for all these invalid grants.

This view being accepted by the Board and Government the assessment rules were altered and Assistant Settlement Officers directed to settle rents for all *zamindar-diu* grants with effect from the 1st January 1898, the holders of resumed *jagirs* being treated as non-occupancy raiyats and the others generally as occupancy raiyats (see Rule 14 of Appendix C). In the case of *minha* there can be no doubt that the fixing of a rent was the most convenient course, as it could be done by a small addition to the existing rent of the holding; but on the other hand I am of opinion that the rents were often high enough already and the *pahi* raiyats, like the *thani* at the last settlement, paid for their *minha* by a higher rate of rent on the rest of their land. In some cases of that nature the difficulty was got over by not recognising the *minha* as such, but treating it as an integral part of the rent-paying holding. In the case of gifts to Brahmans there is also no doubt that the fixing of a fair rent put the zamindar in a much stronger position than the mere assessment to revenue, as in the latter case the grant was only voidable on the sale of the estate for arrear of revenue (section 52 of Act XI. of 1859) if created since the settlement.

The case of *jagirs* stands on a wholly different footing. These grants were to chiefly two classes of persons, either to barbers and potters, etc., in payment for their services to the proprietor and his tenants, or to low caste men who in return carried the zamindar's *palki* and tilled his private lands. They were pure service grants tenable, by the custom of the country, only during the pleasure of the grantor, and excluded from the operation of the Tenancy Act. In many cases indeed part of the holding was rent paying and a portion only was held rent free in return for service, and it was simple to assess an extra rent for the balance previously rent-free. But such tenures were commonest among under-raiyats and tenants of *lakhrajdars* whose rents were not altered. To give the holders of purely service tenures occupancy or non-occupancy rights was certainly hard on the zamindars, who in some cases have complained that in consequence they have been deprived of the necessary services of the *jagirdars* who, once secure in the possession of their lands, refused to work.

In other instances neither *jagirdar* nor zamindar would accept any rent whatever, neither did they admit the relation of landlord and tenant. The difficulty was got over by treating the lands as the proprietor's *nijhas* and valuing them accordingly; and this, in my opinion, would have generally been the better course.

Certain cases however were found in which the so-called *jagirs* were merely suspensions of rent or a portion of the rent in a settled raiyat's holding in return for services. Not a few instances also occurred in which the zamindar caused a record of *jagir* to be made in the hope of destroying the status of his raiyats. With these exceptions the *jagirdars* had really no rights and it was quite unnecessary to record their possession, but they might have been entered

in the *khatians* as cultivating the proprietor's private lands in payment for services rendered. It is not possible to state accurately the number of invalid grants assessed to rent and revenue as they have in many cases been included in the raiyati holdings, but the following figures are approximately correct; they do not include the permanently-settled estate of Madhupur, the circumstances of which are wholly different :—

DISTRICT.	ASSESSED TO RENT.			VALUED FOR REVENUE.		
	Number.	Area.	Rent.	Number.	Area.	Rent.
		Acres.	Rs.		Acres.	Rs.
Cuttack ...	5,200	3,300	7,200	16,000	13,100	27,500
Puri ...	160	800	700	4,000	1,700	3,400
Balasore ...	3,100	4,100	4,900	9,700	8,900	15,300

470. * The village watchman, or *chaukidar* as he is now commonly called, is one of the most ancient institutions of the country, so old that we have lost sight of his origin.

Chaukidars.

In the Hindu times we find that the *danduasi* or 'staff-bearer' guarded the agricultural village as the *chatia*† did those of the bazar, and under the Mahomedan régime they only changed their name to *chaukia* or *chaukidar*. These men were essentially village servants, but the duties of watch and ward were also performed by *paiks* or footmen who appear to have been servants or retainers of the *talugdar*, engaged equally in police work and in rent collection. Yet another class are found of *khandaits* and of *paiks* of the *Khandait* caste holding larger *jagirs* and appearing to resemble somewhat the *Ghatwals* of Bankura and Birbhum. These men were independent of the zamindar and performed their duties in subordination to the *amil* or principal executive officer of the division.

Such was the police force at the time of the British conquest, and Regulation XIII of 1805 recognised the existing distinction, providing in Section 5 for the maintenance of *sardar paiks* and their subordinates under the control of the *darogas* of *thanas*, and leaving the village watchmen or *dusadhs* in the position of servants of the zamindars. Regulation XX of 1817 brought these village watchmen under the control of the *darogas*, though still leaving their appointment with the zamindar, and from that time forward they have been regarded as servants of Government though not without duty of service to the zamindar.

At the last settlement it was ordered that for every *chaukidar* about three acres of land should be allowed rent-free, the excess, if any, being resumed and assessed at full rates, and the prescribed amount made up where necessary by some addition from the culturable fallow or *mahal pahi* land. The confirmed *jagir* was treated as *minha*, the area being entered along with that of other unassessed land of the estate.

In 1841 Mr. Commissioner Mills made proposals for the resumption of all the *jagirs* and the payment of *chaukidars* by fixed salaries, and orders were issued in accordance with which the *jagirs* of *chaukidars* and *paiks* were resumed and included in the assessed lands. Pending however the confirmation of the proposed scheme the amount assessed was in most cases again deducted from the assets before the revenue was calculated. Later again, in 1843, the usual practice was merely to make a valuation of the *jagir* and leave a note that it was liable to resumption on the completion of the arrangements for money payments. In all cases the allowances on the resumed *jagir* were calculated at the same rates as those on the raiyati rental of village. Mr. D. J. Macneill in his general Report on the Village Watch in Bengal expressed his opinion that the resumption of the *chakran* lands left incomplete in 1845 should be made at the next settlement, and police officers have for the last fifty years been unanimous in condemning the system of remuneration of village police by *jagirs*.

In the Government Resolution of 28th November 1891 on the report of the Police Commission the following orders were passed :—

"The *chaukidari* system in Orissa is shown by the Committee to be in urgent need of reform and three different courses of action are suggested, but not exhaustively examined. The Commissioner of the Division, in consultation with the District Officers is now considering a suggestion to bring all the Orissa *chaukidars* under the Act. If this measure be adopted,

* For a further account see paragraph 333.

† See above paragraph 333 for an explanation of this term.

the Lieutenant-Governor thinks it had better be carried out under the supervision of the Settlement Officer when the *jagirs* held by the *chaukidars* have been surveyed and determined. All these lands should be commuted and the necessary number of *chaukidars* should be decided on and their pay fixed *pari-passu* with the progress of settlement."

Accordingly the Settlement Officer and his assistants were called upon for reports, which were submitted to the Commissioner with Mr. Maude's letter No. 1788 of 29th July 1893.

Government, however, in their letter No. 1561J., again referred the question for further consideration by the Commissioner, and when the settlement of rents began no final orders had been passed, but fair rents were settled for the *chaukidari chakran* lands conditionally on the introduction of a system of cash payments. In a letter No. 309J., dated the 30th April 1896, Mr. R. C. Dutt, the Commissioner, after reviewing the several alternatives before the Government, made the following proposals:—

"(i) *Khundayets* and *paiks* should be relieved of all police duties, and their *jagir* lands should, by an amicable arrangement with them, be assessed to rent, payable to the estates in which they are situate. The service lands of *chaukidars* should likewise be thus assessed to rent. The work of assessment is being done provisionally by Mr. Maddox in the temporarily-settled estates; a special officer should be deputed to do this work in the permanently settled estates, under the instructions of Mr. Maddox.

"(ii) *Jagir* lands thus assessed should be settled with zamindars in the permanently-settled estates by the special officer deputed for the purpose, and 55 per cent. of the rental should be fixed as Government revenue. In the temporarily-settled estates the *jagir* lands now being assessed will be settled with zamindars along with all lands in their estates, and 65 per cent. of the gross assets should be fixed as the Government revenue.

"(iii) In large Government estates like Khurda and Banki the Khurda system should be maintained or the Act introduced; the raiyats should pay a *chaukidari* rate, and a proportionate deduction should be made from their homestead rents.

"(iv) Excluding *chaukidars* in large Government estates, the total number of *chaukidars* in the Division should be reduced to 6,500. They should be paid at a uniform rate of Rs. 3 a month. This expenditure should be considered a charge on land revenue after the *jagir* lands have been assessed and settled, and the temporarily-settled estates have been re-settled in the manner described above.

"(v) The pay of all the *chaukidars* in a district should be drawn by the District Magistrate and paid through the police in such manner as the Magistrate thinks safest and best. The *chaukidars* thus receive their pay directly and punctually from the Magistrate and the police, and should know no other masters."

The Lieutenant-Governor, Sir Alexander Mackenzie, decided that the *Chaukidari Act VI (B.C.)*, of 1870 should be extended to Orissa, exceptions being made only in the case of thinly inhabited and backward tracts; and in paragraph 10 of the Resolution No. 866J. (Police), dated 9th February 1897, passed the following orders:—

"(1) The Act will be introduced throughout Orissa as soon as possible after the completion of the present settlement, the *chaukidari jagirs* being, in the meantime, resumed and settled with the *chaukidar*-holders, who will be treated in all respects as *thani* raiyats of the village in which the lands lie. They will be released from all obligation to serve as *chaukidars*, but will be eligible for appointment as such by the Magistrate.

"(2) The lands will be incorporated with the lands of the estates within which they lie and be included in the settlement of those estates, an allowance of 15 per cent. on the rent for cost of collection being made to the zamindar in each case.

"(3) In consideration of the receipt of the rents of the resumed *jagirs* (less the deduction of 15 per cent.) the Government will undertake to pay the salaries of the *sardar chaukidars* who may be appointed throughout the temporarily-settled parts of Orissa, at the rate of Rs. 6 each per mensem, the maximum number of *sardars* being limited to one for every ten *chaukidars*. This arrangement is subject to the sanction of the Government of India.

"(4) *Jagirs* in the permanently-settled estates will be treated under Part II of the Act.

"(5) Mr. Dutt considers that the present number of *chaukidars* (8,729) is excessive, and would reduce it to 6,500. The Lieutenant-Governor agrees that a considerable reduction may be made without loss of efficiency, and it will be for the District Magistrates to settle to what extent the reduction should be carried, with the view especially of securing that adequate pay shall be given to each *chaukidar*, without imposing an excessive burden on the villagers. The Lieutenant-Governor is disposed to think that the rate of pay should not ordinarily exceed Rs. 4 per mensem.

"(6) In the backward tracts in which it may be decided not to introduce the Act, the *chaukidars* will be under the direct supervision of the Police. They will be given settlement of the *jagir* lands, where such exist, and will, in addition, continue to receive the customary dues from the raiyats, for the realisation of which they should be given such assistance as may be necessary and practicable. Regulation XX of 1817 will continue to apply to these *chaukidars*, until it becomes possible to work Act VI (B.C.) of 1870.

"(7) The Magistrate should be permitted to take advantage of the presence of the Settlement Officer to prepare, as soon as may be, his schedule of villages, settle the number of *chaukidars* required, and work out all details. Enquiries should be made as regards men suitable and available to act as members of *panchayats*, and early report should be submitted whether there are, in fact, any tracts in which it is absolutely impossible to work the Act, or to find even a single man to act as the *panchayat*, the provisions of Section 62 of the Act being bore in mind."

The Local Government's proposals were approved by the Government of India in letter No. 411 in the Home Department dated 1st July 1897 and recommended to the Secretary of State for India in the letter No. 211, dated 4th August 1897. In a despatch of the 4th November 1897 the Secretary of State expressed a doubt whether the *chaukidari jagirs* were liable to resumption, and accordingly a further report was called for and was submitted to the Commissioner with this office letter No. 878, dated the 13th April 1898.

The Commissioner, the Board of Revenue, and the Local Government were unanimous in their opinion that the *jagirs* were liable to resumption, and the Government of India having in their letter No. 458, dated the 27th September 1898, accepted this conclusion, the orders for resumption became final.

In accordance with these orders rents hitherto settled provisionally continued to be settled at the village rate or a little below it, an entry being made in the judgment that the rents would only become payable on the extension to the village of the *Chaukidari Act*. Consent was obtained with little difficulty, as the terms were very easy for the *chaukidar*. For the assistance of the Magistrate, maps on the scale of 1" to the mile of each Thana, showing village boundaries, names and numbers, and the rivers and canals, together with lists of the villages in the Thana arranged geographically, and showing the area and approximate number of houses, have been made over to him.

As to the backward tracts mentioned in paragraph 10 (6) of the Government Resolution, the Commissioner points out that the effect of giving the *chaukidar* settlement of his *jagir* land would be to deprive the Magistrate of all control over him, and recommended (letter No. 437J., dated 25th July 1898, to the Chief Secretary to the Government of Bengal) that in any tract in which it was thought inexpedient to introduce the *Chaukidari Act* the *jagirs* should not be resumed. This proposal was approved by Government in their letter No. 5106J., dated the 26th August 1898, to the Commissioner, but the orders came too late to be given effect to by the Settlement Department.

The only backward tracts in the temporarily-settled area to which the present extension of Act VI is reported to be inexpedient are Parganas Balarampur, Ragri, Shergara, and Kantajhar in Thana Dharansula, and Dalijora in Thana Cuttack. Both Thanas contain backward and permanently-settled areas; and as the judgments expressly provide that the resumption shall not take effect until the Act is introduced, it will be simpler to postpone the extension of the Act to these areas.

The number, area, and rent of the resumed *jagirs* are as follows:—

Number	...	12,100
		Acres.
Area	...	20,200
		Rs. A.
Rent	...	43,000 0
Incidence per acre		2 2

In the permanently-settled areas,* including Madhupur, *chaukidari jagirs* have not been resumed. It is to be observed that in Madhupur all *chaukidari jagir* is shown as granted by the zamindar of that estate, but it is as much Government property as in any temporarily-settled estate and cannot be resumed by the donor.

* This is not quite correct. Rents were assessed on a few such *jagirs* in the *Sataishazari* and *Ekkrajat* mahals belonging to the Puri temple, but the proceedings will have to be revised by the District Magistrate.

471. The *Khandaits* (swordsmen) and *Paiks* (footmen) are the last relics of the old Hindu militia, and under Moghul and Mahratta were utilised as police in subordination to the *amil* and *kotwal*.*

Khandaits and Paiks.

Regulation XII of 1805 protected from resumption the lands assigned to *paiks* and *sardar paiks* for the performance of their police duties, and this section was understood to cover the *khandaits* and the *rahbars* (or road patrols) and such of the *nahabars* as were of the *Khandait* caste.

These men, or such of them as had not been dispossessed by the zamindars or assimilated into the general body of the village watchmen, had their *jagirs* confirmed at the last settlement in consideration of the performance of police duties, which they did so badly that of recent years they had only been employed on miscellaneous duties such as patrolling the roads.

The advisability of resuming their lands was discussed in connection with the reform of the village police system; and in Resolution No. 866J. (Police), dated 9th February 1897, His Honour Sir Alexander Mackenzie announced his determination to release them from all obligation to render service if they would accept settlement on easy terms. The Government orders were as follows—paragraph 11 of the Resolution referred to above:—

“The case of the *khandaits* and *paiks* has, lastly, to be considered. It has already been stated that there are two classes of *khandaits*—those who received their lands from the Mahrattas, and those who were nominated by the zamindars and appointed by the Magistrates. The Government cannot compel the *khandaits* and *paiks* to agree to the resumption of their *jagirs*; but there can be no objection to resumption if they agree, in consideration of the Government relinquishing the right to their services; and the Lieutenant-Governor learns that they have, as a fact, generally expressed to the Settlement Officers their willingness to accept settlement of their lands on that condition. The *jagirs* will, therefore, be resumed by amicable arrangement with the holders. The latter will receive settlement, and will be declared to be raiyats holding at fixed rates, and existing holders will sit at half the assessed rents for their lifetime. The holdings should be included in the estates within which they lie, and form part of its assets in future. If the area of any *khandait's* holding is such as to require that it should be treated as a tenure, the Settlement Officer should report whether it should be so settled at fixed rates. If it is deemed advisable to retain the services of some of the *paiks*, as, for instance, for the patrolling of the main roads, proposals as to the arrangement which should be made for the payment of the men after the resumption of the *jagirs* should be submitted to the Government for orders. The number of *paiks* is especially large in Balasore, and it is possible that they are in some parts of that district discharging the duties of the village watch. If so, the men so employed should be treated as *Chaukidars*, the orders above relating to *Chaukidars* being applied to them and their *jagirs*, save that their *jagirs* should be resumed only with their consent, and settled at half rates for the lifetime of the present holders. The case of Khurda, where it is understood there is a very large number of petty *paik jagirs*, should be especially reported upon.”

By an oversight the rules for the settlement of fair rents were not modified in accordance with this Resolution, and rents continued to be settled at full rates though much leniency was shown in the way of small concessions.

The *khandaits* of Dihi Arakhpur objected at first to the assessment, alleging the great inferiority of their lands, but eventually executed a written agreement to pay rent at Re. 0-12-6 per acre, or at about a fourth of the rates for good average land. The lands held by the *sardar khandait*, Jadumani Pankra, in the Puri District and those of the *paiks* of Balasore were assessed at $\frac{1}{4}$ of the village rate. Most of the remaining *khandait* and *paik jagirs* were assessed at full rates.

The rents so proposed had all been accepted when, towards the close of 1898, it was brought to the notice of the Board of Revenue that the orders of Government had been overlooked; and in their letter No. 960A., dated the 14th October 1898, they submitted to Government a report of the action taken, with a recommendation that what had been done should be approved *ex post facto*, i.e., that the rents accepted should be allowed to stand, that the zamindar should receive the full raiyati allowances on them, that the Chandbali *jagir* should be created a separate estate, and that the Deogaon and Masora *jagirs* should be treated as tenures with rents fixed for the term of settlement.

In their letter No. 6705J., dated the 27th December 1898, Government decided that the original orders of Sir Alexander Mackenzie, so far as they

* See paragraph 332.

presented half rents for the lifetime of the holders, should be given effect to, but accepted the other recommendations of the Board.

Notices were accordingly issued to all *khandaits* to appear on fixed dates at the nearest Thana and have their *khatians* corrected, the same correction being made in the original record of rights and in the copies issued to zamindars. The assets and revenue of all estates were similarly corrected, only half the rents originally settled on the *khandaits'* *jagir* being entered as payable during the lifetime of present holders, and it was provided that the benefit of any increase in the rental of these lands during the term of settlement should be left with the zamindar.

The total area of *khandait* and *paik jagirs* resumed, including *rahbars* and *nahabars* classed as *khandaits*, is 6,910 acres, and the half rent assessed Rs. 5,090, an average of annas 12 per acre.

As to the proposal to retain certain *paiks* for patrolling after the resumption of their *jagirs*, in paragraphs 4 to 6 of his letter No. 437J., of the 25th July, to the Chief Secretary to the Government of Bengal, Mr. Commissioner Stevenson recommended that all their *jagirs* should in any case be resumed, leaving their pay to be fixed thereafter by Government; and in Government Order No. 513J.D., dated 25th May 1899, it was finally decided that it was unnecessary to retain the services of any of the *paiks* or *khandaits*.

472. *Patwaris* or village accountants were under the Hindu and Mahomedan and probably in the early days of the British rule, to be found in every considerable village, but they gradually lapsed into the position of mere servants of the zamindar, and at the last settlement their *jagirs* were, except in the largest estates, resumed and assessed at full rates.

The services of the *patwaris* then retained have been little utilised except in the Puri district, and an attempt made in 1873 to resuscitate them proved a failure.

The question of the maintenance of the record having been discussed in the early stages of this settlement it was generally agreed that paid agency must be substituted for that at present in existence, and in Government letter No. 2604 of 10th May 1894 it was decided that the service lands of *patwaris* should be resumed and assessed at full rates. In accordance with these orders 3,950 acres of *patwari jagir* have been resumed and assessed at Rs. 6,700, and the amount included in the *mufassal* assets of the estates.

473. In paragraphs 40 to 42 of his note on the assessment of the Kotdes Pargana Mr. Nathan proposed that the *jagirs* granted to blacksmiths, carpenters, barbers, washermen, and other village servants should be confirmed, except where the holder was proved not to perform the service for which the land was granted. This proposal was accepted by Government in their order No. 2604 of the 10th May 1894, paragraph 6, and accordingly 8,560 acres of *jagir* land have been confirmed and 1,600 acres resumed and assessed at Rs. 4,800. These figures are for the temporarily-settled area only.

474. Since the year 1883 the question of the establishment of fuel and fodder* reserves had engaged the attention of Government, and in a circular, No. 6 of August 1891, the Board of Revenue pointed out that it may often happen that a Settlement Officer will, in the course of survey and settlement operations, be in a position, either of himself or in conjunction with the managing or village authorities, to effect improvements in regard to sanitation by reserving tanks for drinking purposes, by the assignment of defined places for necessary uses, and for excavation of earth for building.

With these two objects in view, the establishment of fuel and fodder reserves, and the setting apart of specific places for sanitary purposes, the Settlement Officer caused all waste lands and tanks to the use of which the villagers appeared to have a customary right to be recorded as the property of the community *Sarba Sadharan*. Such lands were found in most villages though the right was by no means always admitted by the zamindars and was indeed strenuously opposed by the members of the Balasore National Society. The fact appears to have been that, to quote Mr. Stirling, the resident raiyats

* See also paragraph 263.

of each village were entitled each to a share of the firewood, thatching grass, &c., sufficient for their own consumption, and to graze their own cattle without paying to anybody; they could not however dispose of any produce or admit strange cattle. Where land and fuel is abundant I have generally found this to be still the case, but in some parts the proprietors have kept all the grazing land in their own hands and made a charge for village and strange cattle alike.

The subject was discussed in Mr. Nathan's report on Kotdes, but no final orders were passed. In the Rules of 1896 provision was made for the reservation of lands for cremation and for grazing grounds with the consent of the zamindar. The Assistant Settlement Officers were directed to select in each village a few large fields, not more than 15 to 20 acres in an average village of 400 acres, suitable for grazing and to enter them in a separate *khatian* to which they were required to get the signatures of some of the leading raiyats and of the zamindar, or sub-proprietor, or his agent.

A note was then made in the *khatian* that the village community were entitled to graze their cattle without charge on this land, and that it was on this ground exempted from assessment. Similarly, plots actually used as, or suitable for, cremation grounds were to be set apart, a note being made in the *khatian* of the right of tenants to their use.

Tanks used for drinking purposes were added to the list, but there was some difficulty in reserving these without interfering with the proprietor's right of fishery.

On the whole the measure has met with remarkable success, being extremely popular with the raiyats and not much opposed by the zamindars.

To safeguard these lands against subsequent encroachment a clause has been inserted in the form of *kabuliyat* to be executed by all zamindars and sub-proprietors entering into engagements for the payment of revenue, binding them to preserve as grazing grounds, cremation grounds, and reserved tanks, the plots specified in the schedule which is annexed to the *kabuliyat*, to take no rent or grazing charge, and to take action in the Courts to eject trespassers if required by the Collector to do so.

This clause was objected to by the Balasore Zamindars' Association, but their objection was overruled by Government.*

The clause will however become a dead-letter unless from time to time attention of Collectors is called to it. Zamindars will be very loth to prosecute for cultivation of reserved lands when they can share in the profits by taking rent. An annual report as to the state of the reserved lands in his *chakla* should be called for from each *kanungo*. Inspections should also be made by District and Local Board officers. Of course if the Maintenance of Records Establishment is introduced, the reserved lands would be looked after.

The total area reserved in the province under the above rules is 1,15,000 acres, as follows† :—

District.	Total area.	Area of grazing grounds.	Area of cremation grounds.	Area of other reserved lands.
Cuttack	... 55,300	48,800	6,200	300
Puri	... 22,200	21,400	.....	800
Balasore	... 37,500	36,000	1,300	200
Total	... 1,15,000	1,06,200	7,500	1,300

475. By Rule 24 (?) of the Government Rules under the Bengal Tenancy Act, Chapter VI., it was incumbent on the officer settling rents in connection with a settlement of

revenue to serve by proclamation and posting up in the village a copy of his proceeding setting forth the date on which and the place where he proposed to settle rents.

This notice was invariably given a week or more before the appointed date, and not only was a copy of the proceeding posted in the village, but copies were, as far as possible, served personally on the principal zamindars.

Further, whenever the Revenue Officer proposed to alter an existing rent and the tenant had not appeared in compliance with the general notice men-

* No. 878T.R. of 26th October, 1898.

† See Appendix L.

tioned above, he was served with a special notice informing him of the proposed alteration in his rent.

After the very first commencement there was little difficulty in procuring the attendance of raiyats, and the returns show that in the last two and a half years only 15,298 or 1 per cent. of the tenants dealt with failed to appear, and of these only 9,221 had their rents altered. For the first year's work no return of absentees was made, but the figures would not be very different, and the contrast with the stages of *khanapuri* and attestation when the indifference of the people was perhaps the greatest difficulty with which we had to contend, is very striking.

476. Under section 113 of the Bengal Tenancy Act the rent fixed under section 104 of the Act cannot, except on the ground of a landlord's improvement or of an alteration in the area of the tenure or holding, be altered.

Term for which rents are settled.

- (i) In the case of a tenure, or occupancy holding, or the holding of an under-raiyat having occupancy rights, for 15 years.
- (ii) In the case of a non-occupancy holding or the holding of an under-raiyat not having occupancy rights, for five years.

The privilege of fixation of rent was only extended to under-raiyats by Act III. (B.C.) of 1898, and it is not clear that it applies to the rents settled previous to the 1st November, 1898.

By Government order No. 20 T.R., dated the 24th April, 1895, the privileges of transfer and of fixity of rent for the term of Settlement enjoyed by the *bazgatlidas* were ordered to be maintained to them by an entry in the Settlement record. This has been done, and the same order has further been held to cover the rents of *khariid-jumaba-di* tenure-holders and *tankidars* having rights equal or similar to those of *bazgatlidas*.

The rents of *thana* and *chandina* raiyats have been fixed for the term of Settlement by an entry in the record of rights, made in accordance with the opinion given by the Superintendent and Remembrancer of Legal Affairs in his letter No. 1243 of the 13th February, 1893, to the Secretary to the Board of Revenue.*

CHAPTER XIX.

ASSESSMENT TO REVENUE.

477. A sketch is here given of the procedure in connection with settlement of revenue. The results are given in paragraph 554, etc.

Assessment to revenue.

The work began in the recess of 1897. In order to appreciate the labour involved, it is perhaps necessary to say that in the temporarily-settled area there are nearly 6,400 estates situated in 11,000 villages, that some villages contain portions of 60 estates, and that some estates are situated in more than 100 villages.

478. In the course of the fair rent work Assistant Settlement Officers had been directed to fill up certain compilation registers (*vide* Part III of the rules in Appendix C.).

Compilation

These registers showed - (1) Comparison of assessed areas at the last settlement and now. Where the estate had been partitioned at the last settlement, or during the course of the present settlement, special care was taken to bring together for purposes of comparison all the figures for parent and partitioned or new estates. (2) Comparison of areas and assets. (3) Detailed registers of assets showing for each class of tenants their number, area, existing and settled rent and the difference between the existing and settled rents. Separate figures were given in the register for the tenants of each village in which any portion of the estate was situated.

The next stage was to reduce the information compiled into forms which could be easily dealt with. During the course of this work the Assistant Settlement Officers made totals of the assets and served on each set of zamindars the so-called *special* notice according to the following rule:—

"Rule 6.—As soon as the total of the settled assets of the estate has been compiled, the Assistant Settlement Officers should issue on each zamindar a special notice in the following

* See Director to Board No. 14T.A., dated 3rd January, 1893.

form calculating the revenue at 55 per cent. of the settled assets (unless he has already decided to give some other percentage); on this notice should be shown all the persons recorded for the share in which the person notified is interested, the revenue of that share and the revenue of the whole estate."

" SPECIAL NOTICE.

" Mehal

Tauzi No.

To ^{zamindar} ~~proprietary tenure-holder~~ residing at mauza , Pargana , Zilla
WHEREAS the assessment of the estate , Tauzi No. , of which you are recorded
as a ^{proprietor} ~~proprietary tenure-holder~~ is completed and the new Government revenue has been proposed at
you are hereby required to appear before me, , Assistant Settlement Officer, a
on the , to hear your ^{mahadwar} ~~tenure-holder's~~ *khasat* read.

" Any objections that you may wish to make must be preferred orally or by petition on that day. The assessment papers will be open for your inspection from (date) to (date) at (camp).

" The returns of the above notice must be carefully preserved. When persons appear in answer to these notices, every effort should be made to correct and complete the list of names of proprietors as supplied by the Collector."

479. The next and most important part of the work was the preparation by the Assistant Settlement Officers of a report for each estate.
Assessment reports.

The general principle which has been followed is for an Assistant Settlement Officer to submit a general or block report containing an account of the general conditions, physical and fiscal, of a Pargana or other homogeneous tract. This general report gives cover to special reports for each estate, and saves a great deal of repetition. Where *batwara* has taken place since the last settlement, one special report deals with the original as well as with the new estates. I quote from my No. 1117 of 26th May, 1897, the instructions given for arrangement of the reports and the matters which they should contain:—

" Estates in Orissa vary so much in size and situation that I propose to leave it to Assistant Settlement Officers in charge to direct the officers making completion reports as to the manner in which they should treat the estates, *e.g.*, there are one or two estates which comprise nearly the entire area of two or three Parganas, and there are many estates which comprise nearly the entire area of one Pargana. Generally, however, a few estates make up the area of a block of villages. Thus, though the unit of the report must necessarily be the estate, it is possible to economise much time and labour, and to save much useless repetition by sending up covering reports which may refer to a block of villages, or to a Pargana, or to two or three Parganas.

" I would also remind you that an arrangement of this kind will assist the confirming authority by showing him how estates situated in the same locality with (presumably) the same natural advantages and disadvantages are being treated."

I have endeavoured to model the particular estate reports according to the headings given in forms 11 and 12 of Appendix N of the Manual so far as matters of particular interest to the estate may apply, but I have also endeavoured to avoid repetition by proscribing references to matters general in the covering reports.

" Instructions for the General Report.

- " 1. Boundaries and situation of the block.
- " 2. Physical features and class of soil; any special features of climate or rainfall.
- " 3. An account of the crops grown and results of crop experiments within the area (refer to the Settlement Officer if necessary), methods of agriculture (if peculiar).
- " 4. Communications (railway and roads): specially note if any improvements have been made since the last Settlement.
- " 5. Irrigation, if any; its effect on rent rates.
- " 6. Liability to inundation or drought, or protection by embankments, &c.
- " 7. Towns and markets.
- " 8. Prices of common rice actually recorded at *hats* about the time of submission of the reports (note whether it is a year of scarcity or not).
- " 9. An analysis of rates for estates or villages. Reasons why (if so) *pahi* rates are still less than *thani* rates.
- " 10. General condition of the people; whether emigration is common.
- " 11. Principal products and trades.
- " 12. Payment of village officials and other customs.
- " 13. See Part III, Chapter 15, Survey and Settlement Manual, pages 106-107. Any other matters of general interest (the completion report of the last Settlement should be consulted)."

"A brief history of changes in proprietorship; whether the estate has been sold for arrears of revenue, and why; information, if obtainable, as required in II (a) (5), page 107, Survey and Settlement Manual, any matter which requires explanation; if the estate has been partitioned a brief history of the *batwara*; the desirability of making a *batwara* or of amalgamation of the estate with another; where there is a proprietary tenure-holder some account should be given of the nature of the tenure and the changes in the proprietorship.

"(3) A brief comparison of existing with settled rents ; reasons for supposing that rents are too high or too low ; analysis of the rates of new settled rents and a comparison with the rates of estates in the neighbourhood ; if *pahi* rates have not risen up to *thani* rates, some explanation should be given or a reference made to the paragraph of the General Report which deals with the matter ; whether the settled rents are realisable or not, and if not, why not, i.e., on account of liability of the lands to drought or inundation ; whether rents were previously collected in full or not ; whether any prospective difficulty in realising rents is apprehended ; any information regarding *abwabs* ; whether the estate is scattered or compact.

"(5) A list of embankments in the estate classified according to Mr. Odling's note (for inclusion in the *kabuliyat*).

"(7) Any special *sairat* collections, e g., income from quarry, jungle-cutting, &c.

"(9) A brief *résumé* of the facts which led the Assistant Settlement Officer to fix the amount of allowance proposed.

" (a) For the proprietary tenure-holders.

" (b) For the proprietor.

"(10) Any facts of special interest not recorded in the report. N.B.—The last Settlement completion report should be consulted).

"(11) The returns of the notices served on the proprietors and their objections, in half margin, with the Assistant Settlement Officer's answers in the other half."

I give below the forms which accompany each special report. The forms have been remodelled by the ingenuity of Mr. H. D. Carey, but they contain the information hitherto given in the forms actually submitted for approval to the Director of Land Records, as well as the information required by the Survey and Settlement Manual :—

Estote.

Tausi No.

Pargan 1.

Name of proprietors.	Father's name.	Residence.	Share.
1	2	3	4

These headings were filled up in accordance with the following instructions:—

The first heading is filled up from the list supplied by the Collector, as amended by the Assistant Settlement Officer after service of notices. This heading should not be finally filled up till the day before the report is submitted.

The second heading is copied direct from *Mahal* Progress Register A.

The third heading.—The 1st, 3rd, 5th, 6th and 7th columns are copied from the totals of the detailed register of *mahal* assets; the 2nd and 4th from the *raida*s, and the rest are calculated from these.

The fourth heading.—The *mufassal jama* is the same as the total assets less any concessions given on valuations for revenue; the *sadar jama* has to be calculated; the proprietor's present income is his existing assets minus the revenue he now pays, and his proposed income is his settled assets minus the proposed revenue.

The amount that will become due to the *Chaukidari* Fund when the *Chaukidari* Act is introduced will be 85 per cent. of the settled rents for resumed *chaukidari jagir*, and this has always to be included in the revenue; thus, if 55 per cent. is the percentage of revenue proposed, the *sadar jama* will be 55 per cent. of the total settled assets plus 30 per cent. of the settled rent for *chaukidari jagirs* resumed, and the amount due to the *Chaukidari* Fund will be (always) 85 per cent. of the rent settled for *chaukidari jagir* resumed.

Besides this form an English copy of the detailed register of *mahal* assets will be sent in with each report. If a number of reports are sent in together, these forms should be cut in half and bound in a volume.

If an estate is situated in one village only, this copy need not be sent in, as it will be the same as the figures in the third heading of the form.

It is to be noticed also that a schedule of embankments and a schedule of grazing and cremation grounds were submitted with each report for inclusion in the *kabuliyat* (*vide* Cap. XVIII, paragraph 474).

For two months—August and September, 1897—Mr. W. C. Macpherson, Director of Land Records, was placed on special duty in Cuttack. All the earliest reports were submitted to him and he revised and improved them.

480. The Rules for assessment to revenue (*vide* Part IV, Appendix C) were drawn up in consultation with Mr. Toynbee, Senior Member of the Board of Revenue. The so-called Government share of the assets (50 to 55 per cent.) was laid down, on the suggestion of Sir Alexander Mackenzie, by the Government of India in their letter of 13th October, 1897 and was subsequently approved by the Secretary of State. The latter also directed that the term of the new settlement should be for 30 years as against the recommendation of the Governments of Bengal and India in favour of 20 years.

481. In order to show the manner in which the assessment to revenue was carried out I propose to quote my remarks recorded in the annual report of 1897-98.

Application of Rules.

Proposals for revenue have been made in accordance with Part IV of the Rules (see Appendix C). The orders of the Government of India are to be found in their letter No. 192 of 13th October, 1897. In every case the special report of the estate has been written by an Assistant Settlement Officer and his report and proposals have been sent up to me under cover of the remarks and proposals of one of the covenanted Assistant Settlement Officers in charge.

I have made my remarks and passed orders on every estate, however small. The reports were then submitted to the Commissioner in the following cases:—

- (1) Where the new revenue exceeds Rs. 100.
- (2) In all estates where proposals for taking less than 50 per cent. or more than 55 per cent. have been made.

Estates not included in (1) and (2) above are considered to be finally confirmed. In a very large number of estates I have under the powers given me by clause 9 of the *kabuliyat*, taken *kabuliyats* from zamindars in anticipation of sanction and subject to confirmation. Amended *kabuliyats* are taken on receipt of orders of the Commissioner or of the Board revising my orders. I may say that the unexpectedly liberal terms offered by the Government of

India and the Secretary of State, as well as the term fixed for the settlement and the powers given me to make *rasadi* proposals up to 10 years, if necessary, have removed all serious objections. I do not think the most sanguine zamindar expected better allowances than 45 per cent. in flooded areas and 40 per cent. in ordinary areas.

To complete the account of the procedure I set forth in greater detail the principles which I have endeavoured to follow in making proposals for revenue. I would preface my remarks by saying that the particular circumstances of zamindars have so far as possible received careful consideration.

(1) In flooded areas, or in estates specially exposed to flood, and in estates composed of scattered portions, proposals were generally made at 50 per cent. Also in other cases (*e.g.*, estates liable to drought) where there is difficulty (through no fault of the proprietor) in realizing assets.

(2) In the following cases *rasadi* proposals have generally been made, provided that the new revenue exceeds Rs. 15.

- (i) Where revenue is enhanced by over 100 per cent. or if the estate is large by over 50 per cent.
- (ii) Where the proprietor's income is diminished by more than 20 per cent. if the amount is large: or more than 25 per cent. if the amount is a small one.
- (iii) Where though the loss of income may not (on paper) be excessive, a large proportion of the new assets is to be collected from *kharida*, *bazyasti* and resumed *jagir*.

Unless the estate is large or the enhancement of revenue enormous (as in the case of some *bazyasti mahals*) the *rasadi* period is not generally extended over five years.

In one, or perhaps two, cases I have had to propose 25 per cent. as initial revenue and 40 per cent. as ultimate revenue. As a rule the *rasadi* proposals are for five years, and start with 5 per cent. or 10 per cent. less than what is ultimately to be taken according to the nature of the estate, the increase of revenue, the circumstances of each proprietor, or the effect of the proposals on his income.

(3) Sixty per cent. has been proposed as revenue when some of the following conditions apply:—

- (i) By taking less than 60 per cent. revenue is reduced without any cause, such as reduction of assets.
- (ii) By proposals at 60 per cent. the proprietor's income is raised, and Government does not get a fair share of the rise in assets.
- (iii) Where there has been fraud or wilful concealment of assets, and Government does not get a fair share by taking less than 60 per cent.
- (iv) When, though protection and irrigation have been extended to the estate, the proprietor does not do his duty by it, and proposals at 60 per cent. do not affect his income or do not severely reduce it.

(4) Sixty-five per cent. has only been proposed where there has been no reduction of assets and there is no ground for reduction of revenue.

(5) Proposals are generally less severe when there are a large number of small cultivating proprietors, because enhancement of revenue is to them tantamount to enhancement of rent. On the other hand, zamindars who have obtained by fraud, or who are unaccountably in possession of, large areas of *nijchas*, are generally treated, more severely.

In the majority of estates proposals have been sent up by the officers who assessed the rents, and who have local knowledge. It is to be understood, however, that it has not been possible to do so in all cases, but to remedy this we have served preliminary notices in all cases on zamindars stating the *jamas* which the Assistant Settlement Officers propose to fix, the dates on which the papers will be open to inspection, and the place at which these objections will be heard. These objections have been heard locally as far as possible. I firmly believe that this work has been carried out conscientiously by the Assistant Settlement Officers, and I may be permitted to add that the

local knowledge gained by the covenanted Assistant Settlement Officers in charge and by myself, in the course of our work, has been applied, so far as possible, to each proposal.

The results of these proceedings are shown in Chapter XXII., paragraph 554, etc. It is only necessary to mention the fact here that new revenue has been introduced for 6351* estates, the demand being increased from Rs. 13,84,000 to Rs. 21,03,000, or by more than 52 per cent.

CHAPTER XX.

THE SETTLEMENT RECORD—ITS COMPLETION, CLASSIFICATION, ARRANGEMENT, AND MAINTENANCE.

482. I now propose to describe the records made over to the Collector, to explain how the draft made in camp was finished from the time of draft publication onward, how it was copied, published, and arranged.

Lastly, I propose to give some account of the schemes for its maintenance and the arguments for and against.

483. The usual procedure for the completion of the record was as follows:—

Completion of record of rights. Rents having been settled as described in the last chapter and all miscellaneous corrections and orders given effect to, the *khatian* and *khewat* were, under Section 105 (1) of Act VIII of 1886, read out in the village by a *kanungo* who at the same time pointed out to the tenants the lands reserved for grazing or other purposes.

After being thus published the draft record remained for a month in charge of the camp record keeper, and during that period any interested party was allowed to see it, and could prefer a summary objection under Section 105 or bring a suit under Section 106 for the correction of any entry.

When all objections had been disposed of, that is, about two months after the date of settlement of rents, and all corrections checked and necessary figures abstracted for the completion reports, the record was put up to the Assistant Settlement Officer, who, after satisfying himself that it was complete, ordered it to be sent to head-quarters for copying.

At the head-quarters the record keeper received the records thus sent in and handed them on as required to the copying department, where one complete copy was prepared for final publication, another less full to serve as the zamindar's rent-roll, and for each tenant a copy of the draft *khatian* of his lands.

After being copied and compared and checked, the final record, consisting of *khewat*, *khatians*, schedule totals and schedules, was made over to a *kanungo* who read out the *khatians* and *khewats* in the village, signed and dated the seal on them, distributed to the tenants, or such as came, their copies, and returned the record and undistributed *khatians* with a certificate of final publication to the head office.

Then, after any suits still pending under Section 106 had been disposed of and the *khatians* concerned corrected and published, the records were re-arranged, unimportant papers being set aside and those to be preserved arranged in A and B files as explained below.

The records were then numbered and arranged by Thanas, and the *khewat* finally revised at the time of taking *kabutiyats* having been included, were ready to be made over to the Collector.

This is a very summary sketch of the general history of a record, and the only differences in the stages here described introduced by Act III (B.C.) of 1898 were (1) that the record was published before rents were settled, (2) that formal suits could not be brought in respect of temporarily-settled revenue-paying lands, but could be brought even after final publication in respect of permanently-settled lands.

484. Draft publication was very simple work. Notice having been duly published seven days in advance, the *kanungo* went to the village and there read out to such of the villagers as attended the entries in the *khatians* and *khewat*, and informed them that at any time during the next month they could see the records in the camp.

* Including 6 *Killajats* estates, see paragraph 610.

A *kanungo*, a *muharrir* and two peons were attached to each camp for this work, but there was rarely enough to keep them fully employed; the *muharrir* was drafted to general duty and the *kanungo* combined with publication local enquiries of various kinds. For a *kanungo* doing no other work 25,000 to 30,000 plots a month was a good outturn, and we may take it that the cost was not more than Rs. 30 for 20,000 plots, or Rs. 12,000 for the Province.

485. The final rule for the correction of records as it stood in 1895 was that every order must be given effect to in every

Correction of records.

part of the record, alterations in the *khatian* and *khewat* being initialled by the Assistant Settlement Officer himself; those in *khaskra*, *terij*s and statements by the head *muharrirs*.

The first exception made to this rule was in 1895, when the final attestation of comparative statements of *jagir*, *bazyafli* and *nijot* lands being stopped, they ceased to be corrected.

The next was in March 1896, when at the conference held at Bhadrak it was decided to discontinue the correction of boundaries.

With these two exceptions, all orders passed by Assistant Settlement Officers in camp have, before the records were returned to head-quarters as complete, been given effect to in the *khewat*, *khatian*, *khaskra*, *lakhiraj bahal* statements, schedules, *terij*, schedule totals, *tahsilalahida* statement and village trace.

The *milan khaskra* was not usually corrected in detail, but the totals of the *khaskra* were checked and compared with the total of the *khatians*.

486. In the two districts of Cuttack and Balasore the *khaskra* has been, or at least has been supposed to be, corrected in

Correction of khaskra.

accordance with all orders passed before or after attestation; but in the Puri district in an inspection of December 1896 Mr. McPherson found that a great deal of time was being spent on correcting the *khaskra* in accordance with alterations already made in the *khatian*; and inasmuch as the *khaskra* was not a part of the record of rights, he considered the work unnecessary, and ordered it to be discontinued.

The result is that the *khatian* and *khaskra* will not always agree, the latter being often incorrect. In a small number of villages the discrepancies were reconciled at the time of correction of boundaries as described in the next paragraph.

Hitherto nothing has been done towards supplying a fair copy of the *khaskra* to the Collectors, but it is made over as it is, full of crasures and sometimes incorrect.

I have in my report on the Bill of 1897 for the amendment of the Tenancy Act recommended that an abstract of the *khaskra* should be prepared as an index to the village map and should form part of the record of rights. It would contain only the number, area, *tauzi* numbers of estate, name of tenant, and *khatian* number. Such an index might still be prepared from the *khatians* at a cost of not more than Rs. 30,000, and I strongly recommend that it should be made and attached to the map, unless indeed completely new *khaskras* are written as proposed in the scheme for maintenance of the land records submitted with my letter No. 1040, dated the 16th May 1899.

487. Under section 102 (c) of the Bengal Tenancy Act the boundaries of a tenant's land were required to be shown in the

Boundaries.

record of rights, and accordingly the names of the tenants holding on the four sides of each field were entered in *khaskra* and *khatian* by the *khanapuri amin* except in the case of houses and unoccupied lands.

In the case of tenure-holders, or raiyats with under-raiyats, the boundaries were usually entered in the tenant's or under-raiyat's *khatian* only for the lands which they occupied, and full details were only given in the landlords' *khatians* for the lands in their own possession.

After *khanapuri* the correction of the name of a tenant of any one field would usually involve the correction of the boundaries of the four surrounding fields in both *khaskra* and *khatian*.

This, though very laborious, continued to be the rule down to 1896, when, at the Bhadrak conference of the 25th March, it was decided to discontinue the correction of boundaries, on the ground that the expenditure and delay were quite disproportionate to the value of the corrections.

When the fair copying of the *khatians* was begun the question of omitting boundaries was again mooted, but for some time no decision was arrived at, and the boundaries as they stood were copied and published in the final record.

I expressed my disapproval of this procedure in my report on the amendment of the Tenancy Act; and in a letter No. 187T.S., dated 25th May 1897, Mr. W. C. Macpherson, the Director of Land Records, expressed his strong disapproval of the publication of incorrect records.

Immediate steps were taken to secure that for the future two out of the four boundaries of every field should be corrected, and those two only entered on the final record.

The procedure adopted was first to correct column 7 (name of tenant) in the *khalsa* by comparing with the *khatian*, then from the map and *khalsa* to correct the north and south boundaries of every plot in the village, and lastly to correct from the *khalsa* the boundaries in the *khatian*.

I estimate that for considerably more than half the Province the boundaries have been thus corrected. Some of the work was done by paid men, and where temporary men were employed the rate was from 6 to 8 annas per 100 plots for a pair of muharrirs who did some 200 fields a day.

The work must at this rate have cost Rs. 20,000, but it had the advantage of serving as a check on the *khasra* and of saving time in copying by allowing the omission of two boundaries.

488. The draft *khatians* were bulky and full of corrections, and it was obviously out of the question that they should be filed in original in the Collector's office, and in June 1896 it was finally decided to copy them in a continuous form with a slip heading adapted from that given as No. 7, Appendix G, to the Survey and Settlement Manual of 1805.

The form was as follows:—

UPPER PORTION.

Khatian No. Mausa No. Pargana Thana Volume No.

[illegible]

LOWER PORTION.

<i>Mahal</i>	<i>Tausi No.</i>	<i>Name of zamindar</i>	<i>Khesat No.</i>
--------------	------------------	-------------------------	-------------------

[illegible]

This form was to be used both for the final record and for the copy to be given to the proprietors. For the tenants the form of the working *khatian* was preserved, viz:—

<i>Serial No.</i>	<i>Warija of</i>	<i>Son of</i>	<i>holding land as</i>	<i>in Mahal</i>	<i>Mauza</i>
<i>No.</i>	<i>Pargana</i>	<i>District</i>	<i>the proprietary right of</i>	<i>Proprietors according to</i>	<i>Khowat</i>

[illegible]

For the preparation of these copies rules were first drawn up in August 1896 and passed by the Director in September of that year.

The copying was to be done at local centres to which the records would be sent in from camp. At each centre would be a supervisor, under him one or two squads of 30 muharrirs, of whom 4 to 8 would be employed on comparing.

Centres were eventually formed at Cuttack, Jajpur, and Kendrapara in the Cuttack District; at Balasore and Bhadrak in the Balasore District; and at Pipli in the Puri District.

At each centre were one or two squads consisting each of—

				Ra.
1	Supervisor on	...	...	30 to 35
2	Munarrins on	...	...	20 each
2	Assistant munarrins on	...	...	16 "
2	Supervisors' munarrins on	...	...	12 "
2	Peons on	...	...	5 "
1	Sealer	...	...	6
1	Daftari	...	...	6
75	Copyists	...	...	...
36	Comparers	...	...	...

Work was at first slow and rates high, viz., for the final records 8 annas per 100 plots, for the raiyat's copy 7 annas per 100 plots, and for the zamindari copy 5 annas per 100 plots.

Comparing was paid for at 12 annas per 1,000 numbers, the head comparer being paid a fixed salary.

In March 1897 the rates had been reduced to 7 annas for the final record, 6 annas for the raiyats, and 3 annas for the zamindari copy. These rates were at the close of the year again reduced to 6 annas, 5 annas 4 pie, and 3 annas, respectively, and the comparers were paid fixed salaries of from Rs. 12 to Rs. 15. Even so, the muharrirs worked so much faster that their earnings were larger at the reduced than at the former higher rates.

The total expenditure on copying these records is as follows :—

District.	NUMBER OF VIELDS COPIED INTO—			Cost of copying.	Cost of comparing, supervision, &c.	Total.
	Final record.	Raiyat's copy.	Zamindar's copy.			
1	2	3	4	5	6	7
				Rs.	Rs.	Rs.
Cuttack ...	4,142,939	3,295,370	3,578,421	58,570	9,055	67,625
Puri ...	1,721,337	1,311,077	1,258,556	23,327	3,648	26,975
Balasore ...	2,584,901	2,028,489	2,024,902	30,415	7,312	37,727
Total ...	8,449,177	6,534,886	6,856,879	1,12,812	20,015	1,32,827

489. The copy of the *khatians* prepared for the final record was at first an exact *replica* of the entries in the draft, omitting only the former rent where a new one had been settled.

Arrangement of record.

The order of the entries was as follows :—

- | | |
|--|--------------------------------------|
| 1. Government lands ... | |
| 2. Tenants of Government ... | |
| 3. Revenue-free lands ... | For the whole village. |
| 4. Tenants of revenue-free lands ... | |
| 5. <i>Kharida jamabandi</i> ... | |
| 6. <i>Bazyafti</i> tenure-holders ... | |
| 7. <i>Do.</i> raiyats ... | |
| 8. <i>Thani</i> " ... | |
| 9. <i>Thani-pahi</i> " ... | |
| 10. <i>Pahi</i> settled and occupancy raiyats ... | |
| 11. Non-occupancy raiyats ... | |
| 12. <i>Chandi</i> " ... | For the first estate in the village. |
| 13. Resumed <i>jagirs</i> and rent-free grants ... | |
| 14. Proprietor's private lands ... | |
| 15. Invalid grants assessed for revenue ... | |
| 16. Confirmed <i>jagirs</i> ... | |
| 17. Waste lands ... | |
| 18. Under-raiyats ... | |
| 19. Raiyats of proprietor's private lands, of <i>jagir</i> , &c. | |

And then the same for the next estate, and so on.

The numbering of classes 1 to 4 was the same as that of the *...* of Government and revenue-free lands, and from 5 onwards the numbers of the *khatians* followed the schedule.

The first important alteration was in May 1897, when, in accordance with the views expressed by the Director, Mr. Macpherson, in his letter No. 187 T.S., dated the 25th June 1897, only the north and south boundaries were entered in the *khatians*.

A little later another change was made chiefly with a view to shortening the record, and full details of their lands ceased to be entered in the *khatians* of tenure-holders, *lakhirajdars*, or departments of Government having tenants under them.

For lands in the immediate possession of the tenure-holders, &c., details of the plots, their area, class and boundaries continued to be shown, but in the case of lands held by tenants, only the name of tenant, number of plots, their total area, and the rent payable by the tenant with a reference to the number of his *khatian* in which the details might be found, were given.

The following example of a *kharida jamabandi* tenure-holder's *khatian* will explain what is meant, and to show the difference in treatment, a copy of the continuous *khatian* of a *thani* raiyat with under-raiyats is also given :—

Serial No.	Name of occupant.	Plot No.	Boundaries.	Class of crop.	Area.	Exist- ing-rent.	Settled rent.	Status.	REMARKS.
1	2	3	4	5	6	7	8	9	10
KHARIDA JAMABANDI TENURE-HOLDERS.									
	Lakhan Panda, son of Rameshar Panda, residing at Boliugram, Pargana Paenda, Thana Salepur.	16	N. Gopal Malik & Ram Botal.	Sarad, <i>Khajoor</i> , 3 <i>Kitas</i> .	A. D. 1-28	...	R. A. 4 4	<i>Kharida jama- bandi</i> tenure- holder.	This rent is fixed for the term of settle- ment.
		28	N. himself, Fakir Das.	<i>Dioli</i> , <i>Birhi</i> , 1 <i>Kita</i> .		75			
	Total <i>nij dakhul</i> held by raiyats.	2	.....	3 <i>Kitas</i>	...	30			
	Ram Das Nos. 191	4	.....	1 "	...	80	3 0	Occupancy.	
	Lakhan Bahu, Nos. 192	1	.....	1 "	...	70	<i>Dhulidhag</i>	Non-occu- pancy.	
	Total	7	.....	11	...	850	.....	
THANI RAIYATS.									
	Fakir Das and Kali Das, sons of Ram Das, residing in the village.	12	N. Gopi Bahu, & Asthan.	Sarad, <i>Khajoor</i> , 3 <i>Kitas</i> .	1-28	...	8 2	Thani settled raiyat.	Ditto.
		17	N. Ram Das, & Balu Lunka.	<i>Dioli</i> , <i>khitchi</i> , 1 <i>Kita</i> .		75	.....	.....	Under-raiy at Ram Das, Nos. 191, rent <i>dahulidhag</i> .
	<i>Minka</i>	35	.....	House, 1 <i>Kita</i>		15			
	Total	3	...	5	...	815			

400. For the zamindars and proprietary tenure-holders one copy of the entries for each estate and tenure in the village was prepared in the continuous form, boundaries being omitted as well as all mention of under-raiyats and under-tenants.

The class of crop was entered only in the *khatians* of lands in the immediate possession of the proprietors. At first the zamindars of the principal estate received also copies of the entries regarding revenue-free and Government lands in the village, but from May 1897 this practice was discontinued. The zamindari copies were made over to the proprietors executing *kabuliyats* as will be explained when dealing with that part of the work.

The raiyats' copies were prepared from the original working *khatian*, and though in a somewhat different form from the continuous *khatian* reproduced the identical entries.

Such copies were prepared and issued free of cost to all tenants in temporarily-settled estates, but not for Government and revenue-free lands, nor for lands in the immediate possession of the proprietors.

At first, indeed, copies were made and given to *lakhirajdars* and their tenants, but in July 1897 the question of the recovery of some part of the cost from the holders of revenue-free lands was mooted and the further distribution of the *khatians* stopped.

It was finally decided that copies of the *khatians* of tenants holding under revenue-free proprietors should be given on payment of one pice per plot, the minimum charge for one *khatian* being, by a subsequent order of December 1898, four annas. *Lakhiraj bahaldars* have been given copies of their own *khatians* on the same terms.

491. The case-work after the preparation of the draft record fell under two main heads —

Case-work after draft publica-
tion

(1) Objections filed under Section 105 (1) of Act VIII of 1885.

(2) Disputes under Section 106 of that Act.

Objections under Section 105 (1) could only be filed within the period, usually one month, of publication of the draft record, and could be presented on plain paper or on the printed forms modelled on the form given in Appendix A to the Survey and Settlement Manual of 1895 and sold at one pice each. When

draft publication began these petitions were required to be stamped, but it was very shortly pointed out that under Section 19 (IX) of the Court-fees Act of 1890 no fee was chargeable, and the practice was discontinued.

Process fees were levied at the discretion of the Assistant Settlement Officer in cases that he thought frivolous or unduly delayed.

Notice having been served on the opposite party, the objections were summarily decided by the Assistant Settlement Officer who recorded a brief finding and an abstract of his grounds, but rarely any evidence except in hotly contested cases.

The number of such objections disposed of is 63,518, as shown in the following table :—

	Cases under Section 105 disposed of, including those under section 108 of the Amending Act.				Total.
	1895-96.	1896-97.	1897-98.	1898-99.	
Cuttack ...	380	18,791	14,877	3,572	32,120
Balasore ...	251	9,162	7,368	2,870	19,651
Puri (excluding Khurda)	17	8,943	1,747	1,040	11,747
Total ...	648	31,896	23,492	7,482	63,518

Doing no other work, an Assistant Settlement Officer could dispose of about 1,000 such objections in a month, so that the time spent on their decision may be taken at six years' work of one officer and the expenditure at Rs. 20,000, besides as much more for the correction of the record.

The large number is due to many questions originally decided at attestation being again revived, and also to a tendency to put off bringing cases to the last moment.

Though the disposal of these objections and the necessary corrections took up so much time, yet, as there was but a limited period for filing them, they did not very seriously retard the completion of the record.

492. It was otherwise with the disputes under Section 106. These were rarely brought until all other means had been exhausted, though in a few cases disputes arising at

Cases—section 106.

a late stage of the proceedings came up for the first time in this form.

They did not as a rule take very long to try, but time was spent in summoning witnesses and giving adjournments on various pretexts; and as the people freely availed themselves of their right of instituting such suits immediately before the final publication of the record under Section 105 (2), Act VIII of 1885, they proved very troublesome.

They were worst in Balasore, where the people appear to have been more litigious; but both there and in the other districts arrangements had to be made for finally publishing *khatians* unaffected by pending suits without waiting for the conclusion of all case-work in a village.

When the cases had been disposed of and the corrections, if any, in the *khatian* made, the records were again sent to the village and the *khatians* previously reserved from publication read out.

This difficulty was removed by Act III (B.C.) of 1898, which put a limit to the time for objections in respect of revenue-paying lands and allowed formal suits in respect of revenue-free and permanently-settled lands to be brought after final publication.

The total number of suits under Section 108 in the Province has been 9,502 besides a few cases tried in 1894-95 before the draft publication of the records. Of these a very large number were compromised or struck off on technical grounds, but the residue represented a large amount of work.

I have estimated* the expenditure on their trial at Rs. 11,283 for the year 1897-98, and the total may be taken at Rs. 12,000 to Rs. 13,000, without taking into account the value of my own time and that of my covenanted assistant.

* Letter No. 1320, dated 3rd July 1899, to the Commissioner of the Division.

Details of cases disposed of are given in the following table:—

		Cases under Section 106 disposed of in the year.				Cases under Section 106 of the old Act disposed of under the Amending Act.* 1898-99.
		1896-96.	1896-97.	1897-98.	1898-99.	
Outtack	...	...	373	3,666	†1,319	393
Balasore	...	...	38	509	2,796	42
Puri (excluding Khurda)	...	...	8	385	314	57
Total	...	41	1,267	6,776	1,418	1,769

* Under Sections 103 and 104.

† 1,128 cases under the old Act and 191 under the new Act.

493. Publication of the finally revised *khatian* and *khewat* under section 105 (2) of Act VIII of 1885 was the last stage in the preparation of the record; after it no change could

be made save on the ground of fraud or clerical error.

It was held that the document actually published constituted the record of rights, and therefore the *kanungo* took with him to the village the final copy of the *khatian* bound up with *khewat* and schedules, as well as the copies prepared for raiyats.

The *khatians* had already been sealed (without signature or date) at the head office, and the *kanungo* commenced by reading out the final record while his muharrir distributed the raiyats' copies and took their receipts in a book kept for the purpose. As each *khatian* was read out or distributed the *kanungo* signed and dated the seal.

In this way a *kanungo* and one muharrir could get through about 25,000 fields a month or more, and the pay of the establishment, a *kanungo* and muharrir and two peons came to Rs. 50; so that Rs. 2 per 1,000 fields, or Rs. 16,000 for the Province, was the original estimate; but as matter of fact a lot of time was spent in travelling and the cost has certainly not been less than Rs. 20,000 for the initial publication alone; and besides this many village records have been partly published a second time as explained in the last paragraph.

At first the *kanungo* published the *khewats* at the same time as the *khatian*, but in 1897 this was stopped, and the *khewats* were not published until after they had been finally revised at the time of taking *kaluliyats*. They were then sent out to the mufassal in batches, and after being published in the villages were pasted into the record in place of the discarded drafts, but this matter will be treated of under the head of *khewats*.

Act III (B.C.) of 1898 made a great difference in respect to final publication in revenue-free and permanently settled areas, as it became only precedent to the institution of suits for enhancements of rents (section 105) or correction of the record (section 106).

Though at the time of final publication the record was nominally complete, there were almost always, under either procedure, corrections to be made in it. Clerical and arithmetical errors were discovered during the extraction and compilation of figures, decisions were reversed on appeal and the original clean copy was often much corrected before it was ready to be made over to the Collector.

This was in no small measure the fault of the law, which made final publication the only limit of correction and at the same time made it necessary to publish the fair copy in original.

The present law [Act III (B.C.) of 1898] has removed this difficulty in the case of temporarily-settled areas, and to a great extent in permanently-settled tracts also.

It is now possible to reserve from both draft and final publication disputed entries.

494. The village *khewats*, part I, as prepared at attestation were in various forms, containing sometimes a list of proprietary interests in the whole estate, sometimes those in the particular village, sometimes both, in varying degrees of correctness.

Besides these village *khewats* a complete set of *mahalwar khewats* showing the lands and the proprietors of each estate was supposed to have been prepared, but was only complete for a few circles when fair rent work began.

At the fair rent stage zamindars were again sent for, the village *khewats* corrected, and the *mahalwar khewats* brought up to date. *Khewats* thus corrected were published in draft and finally bound up in the record of rights.

At the close of the year 1897, when figures having been compiled, notices were served on the zamindars informing them of the proposals for the assessment of the new revenue, they began to put in objections to the entries as to their interests, and a large number of alterations were made in the *mahalwar khewats* which thus differed from the *khewats* in the village records.

The question of the reconciliation of the two records having been discussed in a conference with the Director, orders were issued (Circular No. 149 of 28th December 1897), stopping the final publication of the draft *mausawar khewats* and directing Assistant Settlement Officers to finally correct the *khewats* after the assessment of all estates in a village had been sanctioned, and to publish them at the time of issue of notices to the proprietors for re-engagement.

In the case of incorrect *khewats* already finally published, an extract from the *mahalwar khewat* was to be published in the same manner and bound into the record of rights immediately above the *mausawar khewat*, and a note made on the latter that it was incorrect and superseded by the extract.

These orders were further modified in March 1898, and it was decided to finally revise the *mahalwar khewats* at the time of taking *kabuliyats* for the payment of the new revenue, from these *mahalwar khewats* to prepare *mausawar khewats* and to finally publish and include these in the record of rights.

Under these orders in the Cuttack and Balasore districts correct *khewats* showing the shares in the estate, with a note of separate possession in the village where recognised, have been prepared for every estate and for every proprietary tenure; the only difference being that in Balasore the *khewats* were published in the presence of the assembled zamindars and sub-proprietors, and in Cuttack they were sent for publication to each individual village.

In Puri, as a rule, new *khewats* were not prepared, but the old ones were corrected where necessary and then published; but the tenure-holders' *khewats* have been carefully re-written in the new form and finally published.

It may safely be said that no possible means of securing a correct record of proprietary interests has been neglected.

The Collector's general register as corrected by his register of intermediate mutations has formed the basis of the record; it has been brought up to date during attestation and a note of the share recorded in his name served on every co-sharer at the time of proposal of revenue, and finally all proprietors have been invited to appear for the execution of their *kabuliyats* and even at that stage allowed to prefer objections.

495. The notation used to express shares is one of which the unit is a rupee, divided generally in one of two ways, the

Notation of *khewats*.

former being generally known as the Cuttack and

the latter as the Balasore system:—

(1) Cuttack system—

16 *panas* = 1 rupee,

20 *gandas* = 1 *pan*,

4 *karas* = 1 *yanda*,

8 *krants* = 1 *kara*,

16 *biswas* = 1 *krant*,

20 *gandas* = 1 *biswa*,

4 *karas* = 1 *ganda*,

and so on to *biswas* recurring again from *gandas*.

(2) Balasore system—

16 *annas* = 1 rupee,

12 *pieas* = 1 *anna*,

20 *krants* = 1 *pie*,

16 *biswas* = 1 *krant*,

20 *gandas* = 1 *biswa*.

Under orders of the Director of Land Records and Agriculture the Balasore system, prescribed by the Board in 1892, has now been introduced everywhere.

496. The *terij* serves at once as an index to and an abstract of the *khatians*.

The *terij*.

It was originally prepared by the Survey Department, a separate sheet being attached to each group of *khatians*, and was often very incomplete.

In the season of 1893-94 this work was transferred to the Settlement Department and new rules for the arrangement of entries were drawn up.

Beginning with an abstract for the village, subsequent detailed entries were to be arranged in exactly the same order as the *khatians*; that is, first for the whole village revenue-free proprietors, then their raiyats, and their raiyats' under-raiyats. Next Government lands with raiyats of Government, and after them their under-raiyats. Next the first estate in the village, beginning with the waste lands; then the rent-free, then the quit-rent, and after them the several classes of rent-paying tenants, the entries for the under-tenants of each class immediately following the last entry for the class.

Down to 1895 the form in use was as follows:—

Terij of village

pargana

zamindar.

Serial No.	Name of tenant.	Nature of tenancy.	Number of fields.	CROPPED AREA—				UNCROPPED AREA.		Total area.	Rent as ascertained by Revenue Officer.	REMARKS.
				Other than bari or orchards and bamboo groves.	Bari.	Orchards and bamboo groves.	Total cropped area.	Gher.	Other kinds.			
1	2	3	4	5	6	7	8	9	10	11	12	13

In that year the Director, Mr. W. C. Macpherson, prescribed a new form which might serve at once for the totalling of assets and give details of cultivated and uncultivated, of occupied and unoccupied, and of assessed and unassessed areas.

The form, which was as follows, came into use in 1895-96 and was generally filled up for records attested in that season.

Terij of Estate

Village

Pargana

Serial No.	Name of tenant and nature of tenure or holding.	No. of fields.	AREA.					Total area of tenancy.	Existing rent (cash).	Rate of cash rent per acre.	Settled rent.	REMARKS
			CASH RENT PAYING.		Produce rent paying area.	RENT-FREE AREA.						
			Cultivated, i. e., cropped & herbari current fallow.	Uncultivated area.		Cultivated.	Uncultivated.					
1	2	3	4	5	6	7	8	9	10	11	12	13
			A. D.	A. D. r	A. D.	A. D.	A. D.	A. D.	Rs. A. P.	Rs. A. P.	Rs. A. P.	

In June 1896 the preparation of comparative schedules of areas and recorded rents was begun at the central stations of

Copy of schedules at head-quarters.

Cuttack, Bhadrak, and Pipli with a view to lessening the work in camp, as it was then found that in very many villages no completion *terij* existed.

It was decided not to prepare a fresh *terij* but to let the schedule of rents take its place, and supplement this with a *terij* of revenue-free and Government lands showing only the division into cultivated and uncultivated. In the re-attested areas the schedule also showed cultivated and uncultivated separately, but it does not do so in areas where an old *terij* was found in the records.

* The arrangement of schedules and of the new *terij* of Government and revenue-free lands differed from the previous one in that the main division of revenue-paying lands was into—(1) Tenants paying rent to the proprietor direct; (2) Lands assessed for revenue only, rent-free tenures and waste lands; (3) Tenants of tenants.

In detail the order was—

A. *Terij* of revenue and Government lands—

(1) Government.

(2) Tenants of Government.

(3) Revenue-free.

(4) Tenants of revenue-free lands.

B. Schedule of *first estate*—

(1) *Kharida jamabandi* tenure-holder.

(2) Ordinary tenure-holder.

(3) *Nisfi bdsydfi* tenure-holder.

(4) *Kamil bdsydfi* tenure-holder.

(5) *Nis bdsydfi raiyat*.

(6) *Kamil bdsydfi raiyat*.

(7) *Thani raiyat*.

(8) *Thani pahi raiyat*.

(9) *Pahi occupancy raiyat*.

(10) *Pahi non-occupancy* „

(11) *Chandies raiyat*.

(12) Resumed rent-free lands.

(13) Proprietor's *nijjat*.

(14) Ditto *nyekas*.

(15) Rent-free grants assessed for revenue.

(16) Confirmed *jagir*.

(17) Waste land.

(18) *Raiyats* of class (1) to (4).

(19) Under *raiya*t's class (5) to (12) and of (15) and (16).

(20) *Raiyats* of class (13).

(21) Under *raiya*t's of class (18).

The form of the schedule eventually adopted was as follows:—

Talsi No. *in village* *Pargana* *District* *Village note.*

Serial No.	Name of tenant.	No. of fields.	OLD AREA.		NEW AREA.		Existing rent.	Proposed rent.	Whether accepted or not.	Settled rent.	Whether accepted or not.	REMARKS. (How note reference to judgment in case of non-acceptance.)
			A.	Cultivated.	Uncultivated.	Total.						
1	2	3	4	5	6	7	8	9	10	11	12	13

Columns (1), (6), (8) and (11) were totalled by classes in a statement referred to as the A form, which was bound up with the records.

497. The *milán khasra* is a total of the *khasra* pages showing the different classes of land into which the total area of the village is divided. The crop statement also prepared from the *khasra* shows the acreage under every kind of crop in the village.

Milán khasra and crop statement.

These two statements were compiled by the Survey Department and filed with the *khasra* and were to some extent revised and completed during attestation.

The crop statement of Puri was completed and compiled in 1894 by Babu Prasanna Kumar Banerji, but even in 1897 the figures for the Province were found to be very incomplete.

Such as were available were then compiled, but in 1898 the forms were revised as being too clumsy, and all the figures were again checked by a special staff at the head-quarters stations, the village totals being copied into Thana volumes in the revised form.

498. Statements of cattle and of agricultural implements were prepared by the survey *amins*, but so few of these are now to be found in the records that they have not been compiled, but, where found, are bound with the village notes.

Statements of cattle and agricultural implements.

Classification of papers.

499. The settlement papers were, when complete, divided into three parts:—

- A. Papers to be preserved for ever.
- B. Papers to be preserved for twelve years.
- C. Papers to be destroyed, and statistical papers.

Similarly the case records were divided under the High Court Rules into A, C, and D papers.

The classification was based upon that in Appendix K of the Survey and Settlement Manual of 1895, but with several important alterations.

Among the A papers were—

- (1) The volume of record rights, consisting of—

The *khewats*.

The *khatians*.

The *terij* of Government and revenue-free lands.

The schedule, which served as an index to the *khatians* of revenue pay

The schedule totals or A forms.

The *tahsilalahida* statement or statement of total area in the village.

All these bound up with an index and certificate in red *kharwa* cloth.

- (2) The *khasra* bound in plain brown paper.

(3) The A *misal* consisting of the village rate form, village judgment, *mirat* statement, *taufir* statement, soil or rate map.

- (4) The village trace.

The B papers contained all petitions not summarily rejected and the orders thereon; records of disputes instituted otherwise than by petition and orders thereon; records of objections under section 105.

These five groups of papers with the A C papers of case records were set apart in one bundle.

All other village papers except the village notes and the lists of agricultural stock were set aside to be destroyed after extraction of the necessary figures.

500. Throughout the settlement as well as the survey operations the

The Thana arrangement.

Pargana had been accepted as the territorial and fiscal subdivision of the district. Circles were

arranged, returns submitted, and reports prepared by Parganas.

It was, however, pointed out by Mr. Lyon, the Director, that the Pargana was often a conglomeration of scattered villages, and was most inconvenient as a geographical unit, while for executive work both Magistrate and Collector would find an arrangement by Thanas more useful. He accordingly proposed to number all villages within each Thana with consecutive serial numbers beginning at the north-west corner and to arrange all village records in the same order.

He claimed for this arrangement that it would enable the number alone to indicate the position of a village so that on reading in a report the number of a village the head of the District would realise the nature of the locality or could at least place his finger on it in the map while the numbers being arranged geographically, it would be possible to split up the Thana into police or census circles by merely assigning so many numbers to each.

On the other hand it was contended that the Pargana was the recognised unit, that geographically it as a rule coincided with a definite physical division, and that it formed the limit of a group of estates held more or less by one set of proprietors.

The *pros* and *cons* having been carefully discussed it was agreed that the advantages of the Thana arrangement far outweighed any possible disadvantages, and it was resolved to adopt it for all village records, those relating only to estates being still grouped by Parganas.

In accordance with this decision the registers of village totals of *milan khasras* and crop statements, the register of records, the registers of number on houses, of Government and reserved lands, and the village notes have been arranged in the order of the Thana numbers.

An alphabetical list of villages in each Thana has been prepared and made over to the Collector, and in each revenue survey volume has been bound an index to the Pargana giving references to the Thana number, the old survey number and the number in the *masdar* C register.

The Pargana arrangement has been followed in the case of completion reports* which are arranged alphabetically within the Pargana according to the name of the estate, or, in the case of partition, of the parent estate.

Following the same order a register has been prepared showing village by village the assets and details of each class of tenant and of the area of each estate.

Khasras of estates Parganas and will be handed over to the Collectors for the re-writing of their register of revenue-paying estates.

It is intended that the register of revenue-free lands should also be arranged *Thanawar*, but the draft has been made. Parganas and has been handed over in that order to the Collectors as orders have yet been received from the Board of Revenue.

501. A report embodying my final views on this subject was submitted to the Director together with a draft Bill for the imposition of a *patwari* cess and rules for the conduct of the maintenance scheme [see Appendix A (22)]. My conclusions are as follows:—

A yearly maintenance is most desirable for the raiyats if facilities for record of transfers are given; such transfers are however, contrary to custom and will not be acceptable to the zamindars, and may not be accepted by the Courts.

For the protection of raiyats yearly maintenance is not required; the provisions of Section 113 and the large proportion of rents fixed for the term of Settlement are sufficient protection. It is however, desirable to have a periodical revision, *i.e.*, in 1911 to 1913 after fifteen years to recognise *de facto* transfers and to adjust the records of mutations and status. For the zamindars a yearly maintenance is desirable, because the majority have no notion how to keep up their rent-roll, but the papers they have now received are sufficient for fifteen years. Thus a periodical revision after fifteen years is desirable. After giving effect to all transfers and adjusting the records, zamindars will be allowed to apply for settlement of fair rents and such settlement will be made on payment of cost.

For Government a yearly maintenance is not necessary. In the present proceedings an enormous mass of statistics has been supplied. The total cost of a yearly maintenance and complete revision in 1925 will be 48 lakhs, as against 24 lakhs the cost of a revision after fifteen years plus the cost of revision in 1925 and as against 20 lakhs, the cost of revision in 1925 only. In my opinion the expenditure for yearly maintenance is unnecessary; the *patwari* system is quite foreign to Orissa, and there is no one in Orissa who can afford to pay for it. I submit that, for the benefit of all concerned—the raiyat, the zamindar, and Government—a revision in 1911-13 (rents were fixed in 1896-98) followed by the revision in 1925-26 is most desirable. The cost of the two revisions should not, I submit, be more than 24 lakhs and should not exceed by 4 lakhs the cost of single revision in 1925-26.

502. Mr. Lyon, the Director, in his No. 1443 of 4th August 1899 puts the case as follows:—

The Bill has been carefully drafted on the lines indicated in paragraph 11 of letter No. 238T.—B., dated 12th May 1897, from the Government of Bengal to the Government of India, and the rules have been adopted with but slight modifications from those previously submitted by Mr. W. O. Macpherson. It has not been found possible, however, to adopt in its entirety the suggestion made by the Government of India in their letter No. 2397, dated 18th October 1897, that provisions should be made for a legal presumption of truth being attached to the record so soon as the local Government declares by notification that it is satisfied that the record is maintained with sufficient accuracy to justify such action. With

the very inferior agency available for the work of registering mutations in Orissa, it has not seemed to us feasible to attach any value to the new entries in the records until each one has been duly attested by a Revenue Officer of a grade superior to a kanungo, and provision has accordingly been made in the Act to give a certain authority to the alterations in the records after, and not before, such attestation has been made. The provisions of the Bill were discussed by me in detail with Mr. Maddox in April last, and I have at present no modifications to suggest in them. I propose to deal further with the question of the cost of carrying through the scheme in a later paragraph of this letter.

The question which is now submitted for the final decision of Government, is whether it is necessary or advisable to introduce any such scheme as the present one for the maintenance of the records in view either of the prospects of its success, the actual advantages that will be obtained from it, or the very great cost that it will entail. Although a pronouncement on this question has been already made by the Government of India, that Government speaks in its letter of October 1898 referred to above of the improvement of the patwari establishment of Orissa, and does not appear to have gathered from the correspondence that there are for practical purposes no patwaris at all in most parts of Orissa, and that a patwari staff will have to be created for the purposes of the proposed scheme. It is again subsequent to the pronouncement of the Government of India that the Secretary of State has expressed a strong opinion as to the limitation of the assessment of revenue to 55 per cent of the assets, and that definite instructions have been received from the Governments of India and Bengal that the incidence of the proposed patwari cess is not to be considered in assessing revenue in the course of the present Settlement, with the result that, where less than 55 per cent. of the assets has been taken by Government, and in many cases where that limit has been reached, the proprietor and proprietary landholders have been already fully assessed to revenue. I would also note that His Honour Sir Alexander Mackenzie expressed his approval of the scheme in very guarded terms, declaring at the Cuttack Conference of January 1898, that he thought it would be worth the expense if it could be satisfactorily worked, and reporting to the Government of India that while he was disposed to think that the advantages of keeping the records, corrected from year to year, would more than counterbalance the expenses, he desired to bring prominently to the notice of that Government the doubts existing on the subject among competent and experienced officers in Bengal. At the same time the other chief supporter of the proposals, the Hon'ble Mr. George Toynbee, has more than once laid stress on the financial aspect of the question, and in a note dated 29th December 1898, wrote:—

“Before anything else is done, however, I think it should be made quite clear that the proposed patwari establishments will be at least as cheap as the revision establishments, which would have to be entertained (if they are not) when the term of the coming new settlement expires.

“The papers which record the previous discussions of this subject show that the introduction of a local agency for the maintenance of the records has been condemned by almost all the officers who have considered the question, including Sir Charles Stevens, three Commissioners of Orissa—Messrs. Stevenson, Cooke and Dutt—of whom Mr. Stevenson was also for several years Collector of Cuttack, and by all the Collectors who have been consulted on the subject.

“Of the advantages accruing from the existence of an intelligent and trustworthy local agency there can of course be no doubt, and when the village accountant is a permanent institution in every village, sanctioned by immemorial custom, with duties and powers the extent and limitations of which are understood by all, and with ties of association and interest which induce loyalty to his work, he can be of much value to the Government and to the community at large, as a source of information in times of distress, as the unit of the organisation of famine relief, to check oppression on the part of the landlord, and to obviate the necessity for heavy expenditure on future Settlements. But the creation of such an agency in a country in which its working is not understood is a very different matter, and it is now nearly three years since I laid before the Board my reasons for believing that we cannot get the work we want done properly performed by such an agency in Orissa, and that we shall cause serious harassment to the people in our attempts to establish a patwari system with the powers necessary for the maintenance of the record. Moreover, as regards the information actually required from a local agency, I would suggest that the bulk of it can be obtained with the help of our records without any patwari establishment, and that Mr. Maddox's remarks on this point are worthy of attention. By the geographical arrangement of all our records by thanas, by the publication of special thana maps and of thana registers of statistics sufficient to show the agricultural and economic circumstances of each village in each thana, we have afforded in a convenient form for District Officers a mass of information that was previously unattainable without elaborate local enquiries, while in the assessment reports prepared for each pargana and for each group of estates within it full information as to the physical features of the lands of each estate, their liability to flood or drought, the severity of their assessment and the material condition of the tenants occupying them has been provided. By the Settlement of rents of the vast majority of the tenants under the Bengal Tenancy Act for fifteen years, we have stopped that progress in the enhancement of rents which it has been held to be the duty of the patwaris to watch and to check, and there are reasons to believe that there will be very few landlords in Orissa who will be able or will try to break down the rents now settled by us within the period for which they have been settled.

"On the subject of the cost to be incurred upon the scheme I may say at once that I consider that, if the patwaris are to carry out all the duties laid down for them, and if any authority whatsoever is to be given to the entries made by them, the expenditure, both initial and annual, will have to be raised. It will be noted that the original estimates were cut down by my predecessor under some pressure, and that in his final plans he included no procedure for the verification of collections of rent. While this has been now incorporated in the rules, I do not for other reasons, some of which are noted below, consider that the reductions made in the estimates can be accepted, and I anticipate that the actual cost is likely to amount to at least Rs. 1,50,000 initial and Rs. 1,50,000 annually."

"In considering the annual expenditure I think it should be remembered that the cost of carrying out the verification of collections has never been faced by the local officers, and I would suggest further that the serious difficulties we shall find in procuring returns from the samindar appear to have been insufficiently weighed. Mr. Macpherson considered that the task of verifying individual collections was altogether too big for Government to undertake, and although the Government of Bengal would not cut these duties out of the scheme, it has not yet been indicated in what manner and at what expense they are to be carried out. The local officers who attended the preliminary conference held at Outback on 24th January 1898, were clearly of opinion that if the record of collections was to be included, they are of a patwari's circle would have to be reduced below eight square miles, and they also recommended that there should be one kanungo to every ten patwaris, instead of one to every twelve or more as in the present scheme. While I refrain from modifying the present the strength of the proposed staff, which has already been approved by higher authorities, I desire to indicate the doubts I feel as to its adequacy for the work proposed. In the matter of supervision also, I agree with Mr. Maddox in deprecating the light estimate made in the Government of India's letter of the work that the Superintendents of Land Records will have to do, and I anticipate that unlike their brethren in Upper India, where the population is less dense and the land is more sparsely cultivated, they will have their time fully occupied in the inspection and other work laid down for them in the present scheme. I would also call attention to the estimate submitted by Mr. Maddox for three Superintendents of Land Records and their establishments (to be paid for out of general revenues) that he proposes to add to the Collector's staff to complete the scheme. It is not quite clear what duties are to be entrusted to these officers, but I have no doubt Mr. Maddox recognised the value of such officers as those referred to by the Government of India as the Revenue Deputy Collectors and Tahsildars of Northern India, and realising the impossibility of the Superintendents of Land Records provided in the scheme ever carrying out the duties performed by the officers elsewhere, provided three extra supervising officers for the purpose. Apart however, from these general indications of the directions in which the present estimates of costs are likely to be exceeded, I would suggest that some definite addition must be made to the establishment of the Superintendents of Land Records to enable them to keep their copies of the records up to date and to the establishment of the kanungos to enable them to obtain and check the returns of rent collections to be called for from the landlords. In view of the above considerations, and omitting the proposed charge for three superior officers as Superintendents of Land Records at the head-quarters of each district, and making allowance for the low pay to be drawn by patwaris and kanungoes on their first appointment, I am doubtful whether it will be found possible to reduce the annual expenditure, at its lowest estimate, below Rs. 1,50,000.

"The total expenditure on the patwari scheme may thus be estimated at Rs. 1,50,000 for initial expenditure and (Rs. 1,50,000 \times 25) 37,50,000 for recurring expenditure, allowance being made for some delay in introducing the scheme and for its temporary suspension for two or three years at the end of the term of Settlement, during the operations preparatory to the new settlement. With the addition of 7½ lakhs to meet the cost of a revision of the records and re-assessment of the revenue at the expiration of the current settlement, we get a total of 46½ lakhs, and I may add that the cost here estimated for re-settlement assumes the complete success of the maintenance work. Against this total we may set Mr. Maddox's rough estimates, which are, I believe, more than adequate, for the revision of the records after fifteen years, and again at the time of re-settlement, and for a re-settlement after thirty years without any previous revision. He gives 24 lakhs as the probable cost of the double revision, and 20 lakhs as the cost of single revision at the time of re-settlement, and these estimates include all the operations necessary for a re-settlement of the revenue. It will be seen, therefore, that the additional cost involved in the introduction of the patwari scheme amounts to some 22½ lakhs, even if we adopt the proposal for the complete revision of records after fifteen years, a plan that I would commend for the favourable consideration of Government.

"I hope that, in the circumstances, I have detailed above, the project for the imposition of a patwari cess may be reconsidered, and that such orders may be passed as will secure the revision of records after fifteen years, all attempts to maintain them in the meanwhile being dropped. I believe that the information that has been compiled in the course of the present settlement is sufficient for the present purposes of Government and that the advantages to be gained by the creation of a local agency to assist in the general administration of the Province are far outweighed by the serious harassment that this would cause to the people. I suggest that the main object with which the scheme has been prepared—the efficient maintenance of the land records—would not be attained by the means proposed, and I would strongly support Mr. Maddox's contention that the people

of the country, whether landlords or tenants, cannot afford to pay for it. Finally, I would emphasise the fact that we have only now completed lengthy and elaborate settlement proceedings which have unavoidably caused much trouble and inconvenience to the people, and which have brought with them a general increase in rents and an enhancement of revenue by 50 per cent. and would urge on Government that in these circumstances we 'should be chary of imposing fresh burdens on the people, and of introducing a scheme which will involve them in large additional responsibilities and considerable expense, and the success of which is, at the best, problematical.'

I have nothing further to add to the arguments adduced by the Director. The matter is still under the inquiry of Government. I may only mention the fact here that so far from existing in every village there are (or were) only 488 patwaris in Orissa. These were at the last Settlement attached to certain large estates, the revenue of which exceeded Rs. 500. There were 323 patwaris in Pari, while in Cuttack there were 100 and in Balasore 65. In 1891-92, 328 obtained certificates at the Survey School, but since 1897 they have all been relieved from public duties and pay rent for their *jagir* lands which have been resumed and settled with them (see also paragraphs 404 and 405 and the correspondence between the Director of Land Records and the Board of Revenue in January and February 1900).

Part V.

CHAPTER XXI.

AREAS.

503. In the foregoing Chapters, especially in the second, third and fourth, something has been said as to the areas of the districts of Orissa; in this Chapter I propose to discuss at greater length the figures of area found in the Settlement records.

From the statements supplied by the Surveyor-General I abstract the following:—

DISTRICT.	Total area in square miles.	CADASTRALLY SURVEYED.			TOPOGRAPHICALLY SURVEYED.	
		Scale 64"	Scale 32"	Scale 16"	Scale 4"	Scale 2"
Cuttack	... 3,523	6	364	2,419	8	660
Balasore	... 2,088	0	7	1,858	19	33
Puri	... 2,475	0	993	1,026	0	456
Total	.. 8,085	6	1,364	5,296	270	1,149

In the present settlement, figures have been compiled for a portion only of the Province, but deducting the areas of Banki, Kujang and Kanika which have been separately cadastrally surveyed, and of the topographically surveyed Parganas, also of 57 square miles in Killa Darpan and part of the *jagir* melhals of Malud cadastrally surveyed but subsequently excluded from the present settlement, the figures should agree with the village totals shown in the *milan khasras*.

Area in square miles.		Cuttack.	Balasore.	Puri.
Total by Survey	... ..	3,523	2,088	2,475
Deduct—Topographical Survey	... ..	740	223	456
Deduct—Cadastrally Surveyed areas—Kujang, Kanika and Banki	... ..	496	141	...
Deduct—Darpan, Andhari and Manikpatna	... ..	57	...	48
Net areas as per survey	... ..	2,229	1,724	1,971
Area by <i>milan khasra</i>	... ..	2,194	1,712	1,991
Difference	... ..	35	12	20

In Cuttack there has been an obvious error in the survey figures, for Kanika has, according to the completion report, an area of 265 square miles, of which 151 are cadastrally surveyed, while in making up his total of 3,522 square miles the Surveyor-General has taken the total area as 219 square miles, of which only 139 are shown as cadastrally surveyed. Again, in the case of Kujang, he has omitted an area of 142 square miles surveyed on the scale of 4" = 1 mile. This, however, is far from accounting for the discrepancy in the figures, and indeed raises the difference to 47 square miles. I can only suggest that in the survey figures some areas have been shown twice. The correct area of Cuttack is, according to the settlement returns, 3,663 square miles, of which 2,747 have been cadastrally surveyed and 2,194 are dealt with in this report.

In Balasore also the Surveyor-General's area of Kanika appears to be wrong, but the discrepancy cannot be reconciled.

The correct area of the district appears to be 2,075 square miles, of which 1,935 have been cadastrally surveyed and 1,712 are dealt with in this report.

In Puri there has been some confusion as to the Bengal and Madras boundary, and the correction of this line has probably altered the survey areas.

The correct area appears to be 2,499 square miles, out of which 1,528 only are in the Sadar Subdivision, and out of these, 310 square miles of the Chilka and 194 square miles of permanently-settled estates are excluded from settlement, leaving a balance of only 1,024 square miles, including 42 square miles belonging to the Khurda *killa*.

504. In this settlement figures have been compiled from two sources; in

Settlement areas.

the *milan khasras* we have the totals of the *khasras* village by village, and from the completion reports the totals of the areas of the temporarily-settled estates have been obtained.

From these latter are excluded lands permanently settled and revenue-free, as well as lands held by Government for public purposes; and some further adjustment is necessary owing to estates having lands in districts other than that to which they pay revenue, i.e., both Puri and Balasore estates have lands in Cuttack, and some Cuttack estates have lands in Puri and Balasore.

In the following statement I have endeavoured to reconcile the two sets of figures :—

Area in square mile.	Cuttack.	Balasore.	Puri.
Total <i>milan khasra</i> ...	2,194	1,712	1,024*
<i>Deduct—</i>			
Area permanently settled ...	185	Nil	10†
Area revenue free ...	309	170	145
Area of Khurda and <i>ekhrajat</i> lands in the Sadar Subdivision of Puri ...	...	...	42
Lands held by Government for public purposes ...	36	21	6
Lands transferred to estates of other Districts ...	17	33	5
Nett balance of temporarily settled estates ...	1,797	1,488	816
Add lands lying in adjoining districts	38	12	5
Total ...	1,835	1,500	821
Area of estates as shown in Completion Reports ...	1,833	1,499	818

It is almost impossible to account for this discrepancy (·014 per cent.) without a complete re-totalling of the areas of every village. Some mistakes are certain to have occurred in totalling *khatians* and *khasras*, and in spite of the care taken to reconcile the two sets of figures it was impossible to prevent muharriis from fudging, with the inevitable result that the error came out when the figures were re-totalled in another form for the whole Province. I do not think that there are any areas, at least in Cuttack and Balasore, which have escaped assessment; but it is possible that some of the river beds in Cuttack and of the sandy wastes along the shore of Puri may have been omitted. Another possible source of error is the area of the revenue-free lands. It was found after the reconciliation of the total areas was begun, that several large revenue-free villages had been omitted from the Puri registers, and it may be that even now the areas entered in the register do not always agree with the areas in the *khasra*. On the whole, though, I am of opinion that the discrepancies are most probably due to errors in totalling the *milan khasras*. In Balasore the discrepancy curiously coincides with the difference between the areas of the lands transferred from that district to Cuttack and *vice versa*, as now ascertained and the areas at first reported, and it appears probable that some lands actually situated in Cuttack but belonging to Balasore villages have been erroneously included in the *milan khasras* of that district.

505. The most natural comparison to make in order to ascertain the

Extension of cultivation.

extension of cultivation since the last settlement would be that of the past and present cultivated area of the villages of the temporarily-settled Parganas, but unfortunately complete figures for the cultivated area at the last settlement are only

* Sadar Subdivision only.

† Included in *tassi* No. 251.

to be had from the survey records and do not appear to be very trustworthy. Furthermore we have only got them for the Balasore and Puri Districts and not for the whole of Cuttack.

Another method of finding out the extension of cultivation is to compare the cultivated or assessed areas of the temporarily-settled estates only, and for this purpose we have complete and reliable figures for the whole Province.

There is also a statement of the cultivated and uncultivated areas of the temporarily-settled estates in the Appendix to Mr. Commissioner Gouldsbury's Completion Report of the last settlement,* but I do not think the figures are quite trustworthy. Comparing them with the areas assessed and unassessed at last settlement shown in our Completion Reports we get the following results:—

District.	AREA IN ACRES ACCORDING TO MR. GOULDSBURY'S STATEMENT.		AREA IN ACRES ACCORDING TO COMPLETION REPORT OF THE PRESENT SETTLEMENT.	
	Cultivated.	Uncultivated.	Assessed.	Unassessed.
Cuttack	584,015	540,731	621,000	553,900
Puri	448,497	468,532	802,400	196,700
Balasore	464,768	107,943	493,600	449,200

The figures for Puri probably include Khurda, but in the other districts it is clear that the areas are incomplete, and I do not think they can form a basis for any sound inference.

That the proportion of area assessed represents approximately the proportion of area of the whole Pargana cultivated is evident from the following statement, taken for a few Parganas at random:

District.	Parganas.	Percentage of area cultivated as shown in <i>minha</i> <i>khazra</i> .	Percentage of area assessed as shown in completion report.
Cuttack	Ahyas	80	81
	Jajpur	74	78
	Katya	80	84
	Sungra	80	82
	Asureshwar	81	82
	Balubisi	69	69
	Hariharpur	78	80
	Kato	69	61
	Total of District	69	70
Puri	Kotles	79	79
	Chaubiskud	68	66
	Kotrahag	82	83
	Purabiduni	79	75
	Oldhar	46	37
	Total of District	71	71
Balasore	Bisalkhand	82	97
	Sunhat	70	73
	Kama, dachaur*	83	86
	Dasmalang	81	29
	Sahabandar	61	68
	Rautara	68	61
	Total of District	71	72

By adding to the assessed area the figures for *jagir* and *minha* and deducting the uncultivated lands, if any, within the assessed tenures we should get the cultivated area of the estates more exactly; but the assessed area on the whole represents with sufficient accuracy the proportion under cultivation in the Pargana. In Balasore Mr. Kingsford, adjusting the figures in this way, found the cultivated area of the temporarily-settled estates to be 521,300 acres, or 55 per cent. of the whole; while the assessed area was only 493,600 acres, or 52 per cent. The former figure does not, however, allow for uncultivated

homesteads and small plots of fallow in raiyati holdings, so that 52 per cent. is probably more nearly correct.

Taking the totals for the three districts we find the change in the percentages of the areas assessed and cultivated to be as follows:—

DISTRICT.	LAST SETTLEMENT.		PRESENT SETTLEMENT.		DIFFERENCE.	
	Percentage of total area shown in the revenue survey statements as cultivated.	Percentage of temporarily settled area assessed.	Percentage of total area cultivated as per <i>milan kha</i> .	Percentage of temporarily settled area assessed.	Columns 2 and 4.	Columns 3 and 5.
Cuttack		53		70		17
Puri	55	60	71	71	16	11
Balasore	53	52	71	72	18	20

The variation in the percentage of area under cultivation at last settlement as shown in the revenue survey statements is very remarkable, the proportion ranging in Puri from 7 per cent. (Oldhar) to 74 per cent. (Banchas), while the settlement figures give a maximum variation in the proportion of assessed to total area between 32 per cent. in West Athaisi and Matkatpatna, and 74 per cent. in Kotrahang. Again, comparing the revenue survey statements with the *milan khasras*, we find the increase in cultivated area during the term of settlement to vary from 3 per cent. in Astrang to 550 per cent. in Oldhar; while, according to the settlement figures, the increase in area assessed varies from 13 per cent. in Rahang to 88 per cent. in Kodhar. I think therefore that the revenue survey figures of Puri are untrustworthy, and that our conclusions must be based on the figures showing assessed area.

In Balasore also the variation in the survey figures is very great, and I think the settlement figures give a safer basis for our conclusions, but the difference is not so great as in Puri.

Taking then the settlement figures, the approximate increase in assessed and cultivated area is as follows:—

DISTRICT.	ASSESSED AREA OF SETTLED—ACRES.			CULTIVATED AREA OF TEMPORARILY SETTLED PANGNAS—ACRES.		
	Last Settlement.	Present Settlement.	Increase per cent.	Last Settlement.	Present Settlement.	Increase per cent.
Cuttack	621,000	822,500	32	697,000	920,000	32
Puri	802,400	373,300	23	377,000	464,000	23
Balasore	493,200	692,200	40	554,000	776,000	40
Total	1,416,600	1,888,000	33½	1,628,000	2,160,000	33½

The comparatively small increase in Puri is due to the smaller area of culturable land available, while in Balasore, on the other hand, a large area had, at the beginning of the last settlement, been thrown out of cultivation owing to the disastrous cyclones of 1831-32, and has naturally been again cultivated as the country has recovered.

The proportion of the total area now under cultivation is the same in Balasore and Puri and rather more in either than in Cuttack; but this is due chiefly to the larger area of rivers and sand in Cuttack and Puri, the population being sparser and cultivation less advanced in Balasore than in the other two districts.

The accompanying maps VI, VII and VIII will show at a glance which are the most highly cultivated portions of the districts.

506. The culturable area in acres in the three districts as shown in the

Extension of cultivation in the *milan khasras* consists of the following:—

DISTRICT.	New fallow.	Old fallow.	Thatching grass.	Jungle.	Percentage on total area.
Cuttack	31,326	24,384	1,894	10,745	4.86
Puri	9,792	14,302	399	9,196	4.85
Balasore	18,758	55,036	1,007	6,978	7.46
Total	59,876	93,722	3,300	26,919	5.86

Not all of this, however, is at present available. Some part of the jungle and fallow has been set apart for grazing, and the thatching grass is a necessity.

On the other hand, there can be no doubt that some of the waste lands, of which there are nearly 215,000 acres in Cuttack, 164,000 in Balasore, and 10,000 in Puri, could, with a certain expenditure, be reclaimed, and the amount thus made available will more than balance any area within the so-called culturable lands which cannot be broken up.

At present cultivation is extending most rapidly in Balasore and in north-east Cuttack. A large area is available for cultivation in south-west Cuttack, but the soil is very poor.

In Puri there is but little extension of cultivation, the lands still unreclaimed being for the most part inferior, or so liable to inundation as not to repay the risk of loss of crops.

507. The following statement shows Thana by Thana the numbers of villages for which figures are available and their average area in acres:—

Size of village.

DISTRICT	Thana.	NUMBER OF VILLAGES IN each Thana.		Area by square miles.	Average area of village.
		For which area is given.	For which area is not given.		
Cuttack	Dharamsala	720	596	213,792	297
	Cuttack	416	28	170,752	411
	Jagatsaingpur	794	...	286,731	297
	Tirtol	490	326	106,658	218
	Salepur	699	...	193,213	276
	Kendrapara	641	120	149,539	276
	Patamundai	225	169	85,178	379
	Aul	77	476	38,946	506
	Jajpur	703	...	209,824	298
	Total	4,665	1,700	1,403,683	301
Balasore	Bhadrak	546	...	184,088	338
	Dhamnagar	433	...	147,785	341
	Basudobpur	247	...	121,018	489
	Chandbali	67	291	26,244	391
	Soro	884	...	295,824	289
	Balasore	563	...	145,534	260
	Basta	386	...	88,390	254
	Baliapal	465	392	115,028	247
	Jaleswar	16	...	1,467	91
	Total	3,607	683	1,095,778	304
Puri	Puri	677	125	280,428	386
	Pipli	794	...	212,246	270
	Gope	655	59	183,103	330
	Total	2,026	189	1,655,777	324

508. The average area of a holding in each of the three districts is shown in the following

table:—

	AVERAGE AREA OF A HOLDING—IN ACRES			
	Orissa.	Cuttack.	Puri.	Balasore.
1. <i>Kharida jamabandi</i>	1.76	1.33	2.36	4.41
2. <i>Kamil bazyasti</i> ...	1.09	0.79	1.21	1.60
3. <i>Nuft bazyasti</i> ...	1.27	0.96	1.63	1.62
4. <i>Thani</i> ...	1.61	1.62	1.57	1.75
5. <i>Thani pahi</i> ...	4.25	4.17	3.89	4.56
6. <i>Occupancy</i> ...	1.02	1.21	1.38	1.61
7. <i>Non-occupancy</i> ...	1.07	0.80	1.01	1.34
8. <i>Chandina</i> ...	.22	0.21	0.14	0.27
9. <i>Chaukidari jagir</i>	1.67	1.39	1.22	2.88
10. <i>Other jagir</i> ...	0.27	1.90	3.28	3.56
11. <i>Nichas</i> ...	3.47	3.20	3.27	4.40

These figures must not be taken to represent the average area on which a family depend for their support, but as showing the average area of one class of tenure held by one tenant in one village under one landlord.

The figures bring out, as might be expected, two facts of interest. The first, that holdings average largest in Balasore where land is plentiful and rents light, and are smallest in Cuttack where rents are high and where there is much valuable irrigated and protected land. The difference is also due to the much larger number of petty estates in Cuttack than in the other districts; holdings being smallest of all in north Cuttack where partition has been carried to absurd lengths. In Puri, land, at least good land, is as scarce as in Cuttack, but there are fewer estates in each village, and the soil is generally inferior and crops more precarious. The second fact of interest is that the *thani-pahi* class embrace the well-to-do raiyats with large holdings, and that after them the *kharida jamabandi* tenureholders—often the same persons as the *thani* raiyats—hold the next largest areas. This result agrees with the general experience of Assistant Settlement Officers, who found the *thani-pahi* holdings to contain, as a rule, the best lands in the village and to be held by substantial raiyats.

509. Accurate statistics to show the size of holdings at the last settlement could be compiled from the *bhians* and *wariyas* rent rolls and *khatians* of the last settlement), but it would hardly repay the expense and labour involved. For the resumed tenures and for *thani* and *chandina* raiyats, figures, more or less accurate, are to be found in the accounts of Orissa tenures, from which I abstract the following comparative statements:—

CLASS OF TENURE		AVERAGE AREA IN ACRES IN—					
		CUTTACK.		PURI.		BALASORE*.	
		Last Settlement.	Present Settlement.	Last Settlement.	Present Settlement.	Last Settlement.	Present Settlement.
<i>Kharida jamabandi</i>	...	2.6	1.8	6.7	2.9	12.3	4.4
<i>Bayashtu</i>	...	1.3	0.9	Not available.	1.6	2.7	1.7
<i>Thani</i>	...	4.3	2.7†	Ditto	2.5‡	3.2	3.9
<i>Chandina</i>	...	0.3	0.2	Ditto	0.1	0.8	0.3
Total			1.3	1.1†	1.8	2.4	1.8

It is clear that there has been much subdivision of holdings, and think it would probably be safe to say that the average size was at the last settlement between half as much again and twice what it now is.

510. Within the holding the next small unit is the field, that is all the land of one class held under a single tenure and contained within one continuous boundary. The average area of such fields, including fields of waste lands and excluding *thani* is shown in the following statement Thana by Thana:—

DISTRICT AND THANA		AREA, (ACRES.)		Number of fields.	AVERAGE AREA OF FIELD (ACRES),	
		Cultivated.	Uncultivated.		Including waste.	Cultivated fields only
Cuttack.						
Dharamsala	...	1,33,399	80,452	5,10,554	.42	.26
Cuttack	...	74,772	96,026	3,62,915	.47	.26
Jagatsingpur	...	1,75,737	60,072	8,67,111	.27	.20
Tirtol	...	74,160	32,521	2,42,916	.44	.30
Salepur	...	1,41,374	51,838	7,10,829	.29	.19
Kendrapara	...	1,18,859	30,645	4,38,168	.34	.27
Patamundai	..	68,033	17,143	1,56,768	.54	.43
Aul	...	27,958	10,994	71,852	.54	.39
Jajpur	...	1,61,306	48,518	7,31,946	.29	.22
Total	...	9,75,598	4,28,209	40,93,059	.34	.23

* Appendix U to Mr. Kingsford's Report on Balasore.

† Paragraph 18 of Babu Nandakishore Das' Report on the Puri Tenures. The estimated number of holdings 384,089 must be too large, as it exceeds the present number.

‡ Average of *thani* and *thani-pahi*.

DISTRICT AND THANA.	AREA, (ACRES.)		Number of fields.	AVERAGE AREA OF FIELD (ACRES).	
	Cultivated.	Uncultivated.		Including waste.	Cultivated fields only.
<i>Balasore.</i>					
Bhadrak	2,24,638	70,503	7,09,233	41	81
Basudebpur	83,156	39,134	2,06,722	58	42
Basta	59,338	39,457	1,63,723	33	36
Jaleswar	733	268	2,732	36	26
Chandbali	33,546	11,934	93,866	48	35
Balasore	79,405	54,425	2,36,904	56	33
Dhamnagar	33,569	10,024	1,20,833	36	28
Soro	1,88,141	50,677	4,74,278	51	39
Baliapal	74,455	33,379	2,22,649	48	33
Total	7,76,981	3,09,801	22,80,940	48	34
<i>Puri.</i>					
Puri	... } 4,63,802	1,87,490	22,11,812	39	20
Pipli					
Gope					

CHAPTER XXII.

RENT AND REVENUE.

511. I now come to what is the most essential part of a settlement report, the discussion of the rents settled on holdings and tenures, and of the revenue imposed on estates. The chapter really consists of two parts. In the first part there is a general discussion of the figures for assessment of rent, some account of its effect on different classes of tenants, and of its effect in local areas in each District. In the second part the effects of the revenue settlement are dealt with. After some review of early revenue settlements, the effect of the present proceedings on proprietors' and proprietary tenure-holders' incomes is set forth, together with a summary of the objections to assessment and brief accounts of recusancy and of the arrangements for the payment of the new revenue.

PART I.

I have already given a full account of the several classes of tenants and proprietors and of the principles on which rents and revenue have been fixed, and it remains to discuss the incidence and variations of the present assessment.

512. The figures upon which I base my remarks are here abstracted for convenience of reference; further details by local areas are to be found in the Appendices to this report.

Rents, their increase and incidence.

CLASS OF TENANCY.	Number of holdings at present settlement.	AREA IN ACRES.		RENTS OR VALUATIONS, Rs.					INCIDENCE PER ACRE.		
		At last settlement.	At present settlement.	At last settlement.	AT PRESENT SETTLEMENT		DIFFERENCE + OR -		At last settlement.	AT PRESENT SETTLEMENT	
					Existing.	Settled.	Past.	Exist.		Existing.	Settled.
1	2	3	4	5	6	7	8	9	10	11	12
<i>Tanki Bahal</i> ...	1,400	24,000	28,000	13,700	Rs. 18,500	Rs. 18,500	-	300	Rs. 4	Rs. 4	Rs. 4
<i>Kharida Jamahat</i> ...	27,000	45,000	47,000	45,000	61,000	55,000	-	2,000	0 18	0 14	0 14
<i>Other Tenure-holder</i> ...	400	200	800	200	2,000	5,000	+	3,000	0 11	0 12	1 0
<i>Kamil Baryat's</i> ...	40,000	80,000	84,000	80,000	46,000	61,000	-	25,000	0 14	0 12	1 0
<i>Nasir Baryat's</i> ...	1,00,000	221,000	272,000	94,000	61,000	2,30,000	-	2,000	0 7	0 6	1 0
<i>Thani</i> ...	54,000	337,000	84,000	78,000	1,00,000	2,11,000	-	205,000	2 4	2 3	2 8
<i>Thani-pak mixed</i> ...	60,000	...	250,000	...	5,10,000	5,30,000	+	510,000	...	2 0	2 1
<i>Settled and Occupancy.</i> ...	679,000	570,000	904,700	898,700	12,83,500	21,07,000	+	1,007,500	1 9	2 3	2 5
<i>Non-occupancy</i> ...	21,000	...	23,100	...	23,200	45,100	+	23,900	...	1 7	1 10
<i>Chandina</i> ...	41,000	20,000	9,100	70,000	41,000	41,700	-	700	2 10	4 7	4 8
<i>Chandabari Jagir resumed.</i> ...	12,100	...	20,200	...	...	43,000	...	...	...	...	2 2
<i>Other Jagirs resumed</i> ...	4,500	...	12,500	...	...	16,700	...	...	...	...	1 6
<i>Tenancies newly assessed.</i> ...	5,500	...	5,200	...	6,700	12,000	+	4,100	...	0 10	1 9
<i>Tenancies valued for Revenue.</i> ...	29,000	...	23,700	...	20,700	46,200	+	29,500	1 0	1 4	1 10
<i>Lands in the possession of proprietors.</i> ...	49,700	88,700	172,500	147,300	2,04,500	2,04,500	+	237,200	1 11	2 4	2 4
<i>Baradaran Tanki</i> ...	...	2,000	...	1,000	...	...	-	1,000	0 6	...	...
<i>Chakras Tanki</i> ...	...	300	...	...	...	...	-	...	0 8	...	...
<i>Chakras</i> ...	...	12,300	20	5,200	...	...	-	...	0 7	...	5 0
<i>Baral</i> ...	...	...	...	23,000	24,000	24,000	+	10,000	...	...	...
Total ...	1,223,000	1,417,000	1,900,000	2,130,000	24,10,000	36,20,000	+	1,272,000	1 8	1 13	2 1

[For facility of calculation I have reduced the figures to whole hundreds and the total to whole thousands.]

We find that an assessed area of 1,417,000 has increased to 1,888,600 acres, *i.e.*, on the whole by 33 per cent., but varying from 40 per cent. in Balasore to 32 per cent. in Cuttack and 23 per cent. in Puri. Assets had, before re-settlement, risen on the whole from Rs. 21,38,000 to Rs. 34,10,000, or by 59 per cent. and have now been settled at Rs. 38,68,000, the increase (settled assets) since the last settlement being 80 per cent., and in the present proceedings (settled assets over existing) 13½ per cent.

The variation in the Districts is remarkable; the rise in assets during the currency of the settlement in Balasore being 72 per cent., and being now raised by 16 per cent., whereas in Cuttack the increase is 65 per cent., and is now raised by 12 per cent., and in Puri 30 per cent., now raised by 12 per cent.

As regards incidences we find that the increase in Cuttack since the last settlement is 33 per cent., in Balasore 46 per cent., and in Puri 18 per cent.

The same explanation is applicable to all the figures. At the last settlement Balasore was most backward and has made most progress. In Puri the best lands were already taken up, mostly by privileged holders paying, as compared with the rest of the Province (for privileged holders), high rents. Thus in Puri there has been the smallest rise.

In Cuttack, although the increase in cultivation is 32 per cent., the increase in general incidence is only 33 per cent., but at the last settlement the incidence was very high, *i.e.*, Re. 1-14-0 per acre, and it is now Rs. 2-8-0 per acre. In Balasore, with an increase of cultivation amounting to 40 per cent., the general incidence has risen by 46 per cent., *i.e.*, it is now Re. 1-10-7 as against Re. 1-2-8 at the last settlement. In Puri, again, the increase of cultivation is 23 per cent., and the increase of incidence 18 per cent. This, as has already been said, is mainly due to the fact that a smaller increase was obtained from the privileged holders (in possession of the bulk of the assessed area) because they were already paying high rents.

Briefly, while the area assessed has increased by 33 per cent., the total assets had been raised by the proprietors from Rs. 21,38,000 to Rs. 34,10,000, or by 59 per cent., during the currency of the settlement, and are now raised to Rs. 38,68,000, or by 80 per cent.; while the incidence per assessed acre had risen from Re. 1-8-0 to Re. 1-13-0, and is now raised to Rs. 2-1-0.

513. Of the total increase, 12½ lakhs are due to the extension of cultivation and increase of rents previous to the commencement of present operations, and 1½ lakhs to the enhancement of rents during settlement, *i.e.*, by 13·4 per cent.

Now a reference to Chapter VII on the history of prices will show that in the decennial period in which the last assessment was made the price of rice averaged 13½ seers to the rupee, whereas in the last 10 years it has been little more than 18 seers to the rupee. It is an accepted principle of economics that the rent varies approximately as the price of agricultural produce, and if, following the Tenancy Act, we assume ⅓rds of the difference in prices to be a fair measure of the equitable increase of rent, we find that rent rates should have increased by 93 per cent., instead of by 37½ per cent. It would therefore appear that the present assessment is much lighter than that made at the last settlement, in that a smaller proportion of the produce of the land is taken as rent, and it remains to be considered whether the former assessment was too high or the present is too low.

514. Before proceeding to discuss the case of each class of tenants, it is necessary to take into consideration the fact that out of the last settlement assets (Rs. 21,38,000) Rs. 6,82,000* consisted of rents which survived intact up to the present day, having been fixed for the term of settlement.

Deducting this sum, Rs. 6,82,000, from the last settlement assets and the existing assets, we obtain balances of Rs. 14,56,000 and Rs. 27,28,000, respectively.

The above sum of Rs. 6,82,000 has been raised to Rs. 9,02,000 or by 32 per cent., in the present proceedings, the bulk of the increase being derived from enhancements of *bazyafli* and *khariad* tenures.

Deducting Rs. 9,02,000 from the new assets, we have a balance of Rs. 29,66,000.

Now the assessed area has increased on the whole by one third, but, deducting 590,000 acres in which rents were fixed for the term of settlement, we have a balance of 827,000 acres in the assessed area at the last settlement, and in the present assessed area a balance of 1,298,000, the increase being 57 per cent.

On these areas assets have risen from Rs. 14,56,000 to Rs. 29,66,000, i.e., by 103 per cent. At the same time the incidence of rents has risen from Rs. 1.77 to Rs. 2.28, or by a little more than 30 per cent. Thus by an analysis of the figures in which it was possible to secure an increase, we find a very substantial addition; and we must also take into consideration the fact that cultivation has generally extended over inferior lands. An increase of assets amounting to 103 per cent. attended by extension of cultivated area amounting to 57 per cent. and rise in incidence of 30 per cent. is not disappointing. On the whole we may say that, though the assessment is more lenient than that of the last settlement, a fairer distribution of its burdens has been made.

515. I now consider the case of each class of tenants in the statement given in paragraph 512. As to the *tanki bahaldars*, who hold at fixed rates, it is clear that they are better off than formerly, and a rent of eight annas per acre is so light that it detracts but little from the value of the property.

Tanki bahal.

516. *Kharida jumabandi* tenures are in theory waste lands reclaimed by the exertions of the tenureholders and are often of inferior quality; they were nominally allowed at the last settlement a deduction of 20 to 30 per cent. off the full rent, so that their lands were valued at an average of about Rs. 1.30 per acre as against Re. 1.9.0 the average for *pahi* land. The list of incidences in paragraph 512 shows a fall of 1 anna per acre during the term of settlement, which is due, not to the reduction of rents, but to the fact that the last settlement area figures are often exclusive of the waste lands within the tenures, which in the present settlement are included in the rent-paying area, though no rent has been assessed on such part of them as is still unoccupied. Even so, as compared with the valuation of over one rupee per acre at the last settlement, the present rent of Re. 1.6 per acre is very moderate. It represents an average valuation of the land at Re. 1.12 per acre (30 to 20 per cent. having been remitted) against Rs. 2.5, the average rent of the occupancy holdings.

Kharida jamabandi.

517. *Kamil bazyafli* lands were nominally assessed at the last settlement at full rates, but a glance at the statement will show that in practice this was very far from being the case. The rent of 14 annas per acre was a little more than a third of the average rate paid by *thani* raiyats, and just over half of that paid by *pahi*. Curiously enough, it was higher by four annas in Puri than in Cuttack, though the general level of rents was higher in the latter district. It appears that in Cuttack, the *bazyafldars* were let off more easily than in the other parts of the Province; but it remains certain that in all three districts *kamil bazyafli* lands were assessed far below their real value.

Kamil bazyafli.

The diminution in area and fall in the incidence of rent during the term of settlement are due in part at least to the lapse into *pahi* of the resumed *jagirs* and other highly assessed lands and partly also to the tendency to have such lands entered as *nisfi bazyafli*. In the present settlement the rents have been enhanced by 53 per cent. and the settled rents average only Re. 1.5 per acre, or little over half the incidence of *thani* and *pahi* rents.

There is no reason to suppose the quality of these lands to be much below the average, and the assessment is obviously very moderate. At the same time *kamil bazyafli* is regarded as a valuable property, and to suddenly raise the rents further would have created poverty and hardship.

518. *Nisfi bazyafli* tenures were, at the settlement, not only allowed the privilege of holding at half rents, but the rates of valuation were very far below those for raiyati

Nisfi bazyafli.

lands enjoying the same natural advantages.

The incidence of the assessment came to only 6 annas per acre on the whole area, or 7 annas if the waste unassessed lands (*nalack mauj jama*) are excluded, i.e., the valuation was made at about half rates, and the rents are therefore one-fourth of those for similar raiyati lands.

In this settlement the rental has been enhanced by Rs. 1,46,800, or by 100 per cent.

It might at first sight appear that this is more than would be justified by the increase in prices, but it must be borne in mind that the right to sit at half rates expired with the last settlement, so that even had there been no development in the price of agricultural produce and no extension of cultivation, the rents might have been doubled. Therefore, out of Rs. 1,46,800, Rs. 91,700 may be put down to this cause, and the enhancement on other grounds reduced to 30 per cent.* The incidence of the settled rents is only one rupee per acre, and this is obviously not more than half the competition rent for the land, so that despite the large enhancement now made the *bazyastidars* continue to practically enjoy the benefit of half rates. Comparing the incidence of the rents settled for *bazyastidars* with those paid by their under-tenants we find† that the latter pay about Re. 1-12 per acre in Balasore and Rs. 2-11 to Rs. 3-2 per acre in Cuttack, and we may safely assume the average for the Province at not less than Rs. 2-4 per acre or two and quarter times the enhanced rents paid by the *hyasti dars*. Produce rents are even more remunerative.

519. The most striking point about the assessment of *thani* is that the rents now settled are practically no higher than those of the last settlement. It is obvious that

Thani and thani-pahi.

either these lands were over-assessed at the last settlement or that their rents are now too low.

Of the rents as they existed before the last settlement we have very little knowledge, but we learn from the old correspondence‡ that all increments of revenue were levied primarily from the *thani* raiyat, and as the Province was notoriously over-assessed during the first third of this century it is natural that the *thani* rents should have been too high. Indeed, Mr. Commissioner Mills in his Note of 1847 on the completion of the settlement proceedings wrote:—

“There was no difficulty in ascertaining the actual rent paid by the *thanis* as it was notorious that they were almost invariably assessed at the rate infinitely higher than the produce of their lands or other concomitant advantages of residence could enable them to pay.”

We hear frequently of *thani* rents being payable only because the *than* raiyats also cultivated the lands of *lukhirajdars* at favourable rates; or, as in the case of *taluk* Kuida, Balasore, *thani* raiyats earned wages as labourers in Churaman Port, or as coolies in salt manufacture. In the earlier settlement an attempt was made to regulate rents in accordance with the productive powers of the soil, and in his report on *taluk* Bisnabar Mr. Mills gives an interesting calculation of the rent for six *bighas* of land, one-third of which is first, one-third second, and one-third third class. The value of the produce is taken at Rs. 33, the rent at half of that, or Rs. 16-8. Expenses of cultivation are taken, excluding the man's own labour at Rs. 9-12, leaving a total profit of only Rs. 7-4 or less than one-fourth of the produce. Mr. Mills, however, expressed his opinion that the assessment was too high, and states that he would have preferred to have taken as rent a moiety of the produce after deducting expenses of cultivation and an allowance for risk. Later on Mr. Commissioner Ricketts§ laid it down as a principle for settlement of rents that actual payments should be made the basis of assessment to be altered only when the rents paid by individual raiyats should appear to be lower than those paid by others from favour, caprice, or other unsuitable cause satisfactorily demonstrable.

This principle was accepted by the Board with the reservation that enquiries into the productive power of the land and into the rates paid for similar lands elsewhere in the neighbourhood were necessary as a check on fraud and collusion.||

* Calculated on the full or doubled rent

† See paragraph 341.

‡ See Stirling's Minute, paragraph 64; also letter No. 2776, dated 31st December, 1897, printed as Appendix A (No. 13), to this report.

§ No. 1431, dated 23rd September, 1836.

|| Board's letter No. 46 of 30th October, 1836. See paragraph 461, *supra*.

The tendency of these orders was to keep *thani* rents at a very high level at which they stood, but, by rejecting zamindar's papers as fraudulent, and by substituting collections for demands, the Deputy Collectors commonly managed to reduce very glaring inequalities.

In some cases also summary reductions were made by the Collector or Commissioner, as in Chaudakulat, where the assessment on *thani* land was reduced from Rs. 5-4 to Rs. 4 per acre and the *pattas* corrected accordingly, and in Kuhunda Jaipur, where the *thani* rents were reduced from Rs. 6,544 to Rs. 5,034.

Even with all these reductions the rents were still so high that Mr. Mills and Mr. Repton were driven to the conclusion that the rents were paid not out of the profits only of the *thani* lands, but out of those of the *lakhiraj* lands, which the *thani* raiyat enjoyed the privilege of cultivating at a low rent.

The result of this high assessment may be seen in the lapse of *thani* holdings, of which the area has decreased from 337,700 to 196,400 acres.*

The most highly assessed lands were naturally the first to lapse, and the result is a fall in the incidence by an anna per acre, and the enhancement of these rents by $6\frac{1}{2}$ per cent. in the present settlement has only just raised the incidence to Rs. 2-6 per acre, or two annas above the figure at which it stood 60 years ago. This is an anna per acre more than the incidence of rents of ordinary occupancy raiyats, and its fairness will be considered in treating of the latter.

520. Of the nature and origin of *thani-pahi* holdings an account will be found in paragraphs 323 and 462 *supra*. These *Thani-pahi* holdings paid an average rent of Rs. 2 per acre raised by the present enhancements to Rs. 2-1 per acre. The rents are generally Pargana by Pargana little lower than those of pure *thani* and *pahi* raiyats, and the lighter incidence for the Province as a whole is due to the comparatively large area in the lightly assessed Parganas. In this settlement they have been enhanced on the whole by only $5\frac{1}{2}$ per cent. made partly for excess area found in the *pahi* portion of the holdings and partly by the enhancements of the rent of the *thani* lands under the rules for enhancement of *thani*.

These holdings are mostly in the possession of well-to-do raiyats and represent the best lands of the village, and must be considered leniently assessed. That the rents have not been more largely raised by the zamindars I attribute to the greater power of such tenants to resist enhancement. Of course the *pahi* lands taken up subsequently are generally inferior to the *thani* lands, and for this reason there is a general tendency of the incidence to fall.

521. Raiyats, occupancy and non-occupancy, whose rents had not been fixed at last settlement, paid nearly two-thirds of the entire assessment of the Province, and the settlement of their rents was the most difficult task with which we were confronted. I have described ‡ how, after much deliberation, it was decided to abandon all attempts to readjust rents according to the quality of the soil and to work on the basis of the existing rents, adopting in fact the selfsame principle as was enunciated by Mr. Commissioner Ricketts in his letter on the settlement of *thani* rents quoted above.

At the last settlement a lump assessment was made on the *pahi* lands, village by village and estate by estate, and the zamindar was left to make his own arrangements with his tenants.

The assessment was based on the zamindar's rent roll, but it was found that the "zamindar's accounts invariably understated the rents, and it was the practice to assume the *pahi* average at four annas in the rupee lower than the rates actually assessed on *thani* lands" §. So writes Mr. Mills, who, as Assistant, as Collector, and as Commissioner, had seen the commencement and the end of the settlement. A glance at Appendices EA, EB, EC, etc., will show that he understated the difference in the assessment of the two classes, as the incidence of the *pahi* assessment is only Re. 1-9 per acre or eleven annas less than that on *thani*; the difference in the rents per acre being in Cuttack fourteen annas, in Balasore nearly nine annas, and in Puri over nine annas per acre.

* See para. 322.

† See Appendix A. No. 13, letter No. 2776 of 31st December, 1897.

‡ In paras. 440 to 447.

§ Mr. Commissioner Mills' completion report of 1847.

Probably Mr. Mills meant that for lands of the same quality a difference of four annas per acre between *thani* and *pahi* was made; and as at that time the better lands were generally the *thani*, this would be approximately correct. There were, however, one or two Parganas in which the best lands were *pahi* and paid an even higher rent than the *thani*, as in Dihi Arakhpur; and it is common to find the Collector or Commissioner who confirmed the proceedings at the last settlement altering by a stroke of the pen the *pahi* assessment either on the whole estate or village by village.

522. There was nothing, at least during the first half of the currency of the present settlement, to prevent zamindars from enhancing *pahi* rents to the full limit fixed by competition, and in spite of the great increase of cultivation, necessarily involving the assessment of much land that was inferior, the incidence had risen to Rs. 2-3 per acre at the time when rents were attested.

These were the rents recorded in our papers, and the question will naturally be asked whether there is any certainty that they are the rents actually paid, or whether the same difficulty was found in obtaining a correct record as at the last settlement. When in charge of Balasore I found it very difficult to obtain an accurate statement of rents from the zamindars, and the same difficulty was met with in parts of Puri and Cuttack. Sometimes there were disputes between zamindars and tenants as to the rent payable, sometimes they were in collusion to have rents understated, and sometimes neither party had any very clear idea of the rent payable. Indeed, I found many tenants unable to state their rents correctly, and the receipts granted were in such a form that it was almost impossible by an examination of them to find out what rent had been paid. Collusion was combated as far as possible by compelling the zamindars to file their original papers, and occasionally disputes were decided by compromises or by striking a mean between the statements of the parties *.

These troubles were, however, by no means universal even in Balasore, and far less common in Cuttack and Puri, and I think we may confidently claim that the rents finally attested represent very nearly those which were generally being paid. In a few areas only this is perhaps not the case, and I shall revert to the subject when treating in detail of those portions of the Province.

523. In this settlement raiyati rents have been further enhanced by nearly 6·2 per cent. chiefly on account of the excess area not yet assessed by landlords. Part, however, of the addition is due to the enhancement of collusively understated rents and of low rents allowed to retainers and kinsmen of the proprietors. The rents so settled are Rs. 2-5 per acre on an average, viz. in Cuttack Rs. 2-14-0, in Balasore Re. 1-13-6, and in Puri Re. 1-15-5.

524. Comparing these figures with those for other areas for which such statistics are available, we find the incidences of rents of raiyats per cultivated acre to be as follows :—

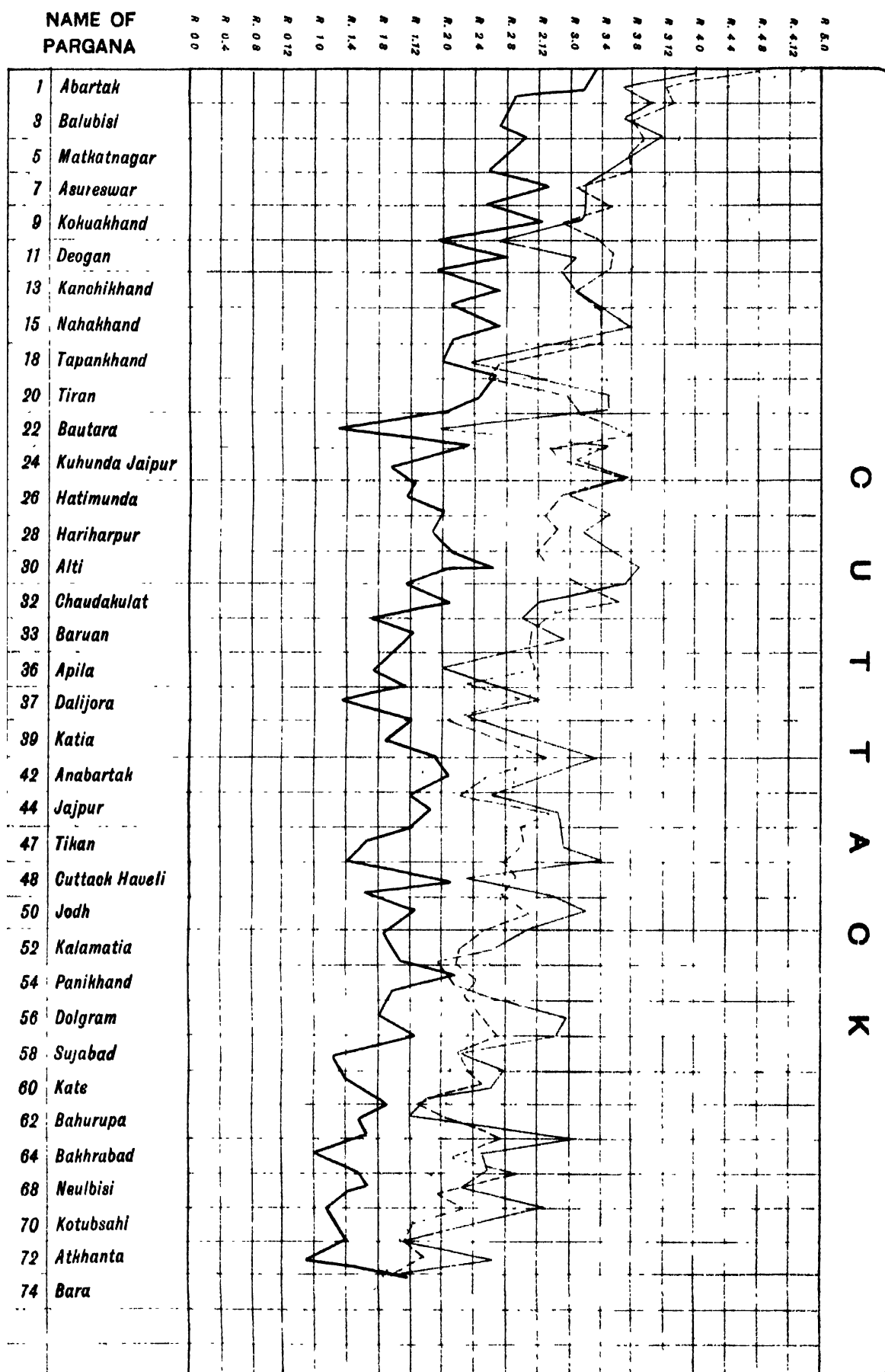
HIGHER.			LOWER.		
Name of place.	Incidence.		Name of place.	Incidence.	
	Rs.	A. P.		Rs.	A. P.
Muzaffarpur	3	15 9	Champaran	...	2 0 3
Saran ...	3	14 6	Sambalpur	...	0 5 5
Tikuri estate	4	4 4	Bilaspur	...	0 9 8
			Raipur	...	0 10 6
			Kanika estate	...	1 3 0
			Kujang estate	...	1 14 10

Considering the denser population and more thorough cultivation in Bihar it is natural that the incidence of rents there should be higher, while Orissa rents are above those of the sparsely populated district of Champaran and the comparatively backward tracts of the Central Provinces.

525. A more useful comparison may be made of the rents of occupancy raiyats with those paid by under-raiyats † and by tenants holding under Government, which may be taken to be for the most part strictly competition rents.

Comparison of rents with those of under-raiyats and tenants of Government.

**COMPARATIVE INCIDENCES OF THANI AND PAHI RENTS AND OF THE RENTS OF
SETTLED AND OCCUPANCY RAIYATS AS SETTLED AT THE LAST
AND AT THE PRESENT SETTLEMENT.**



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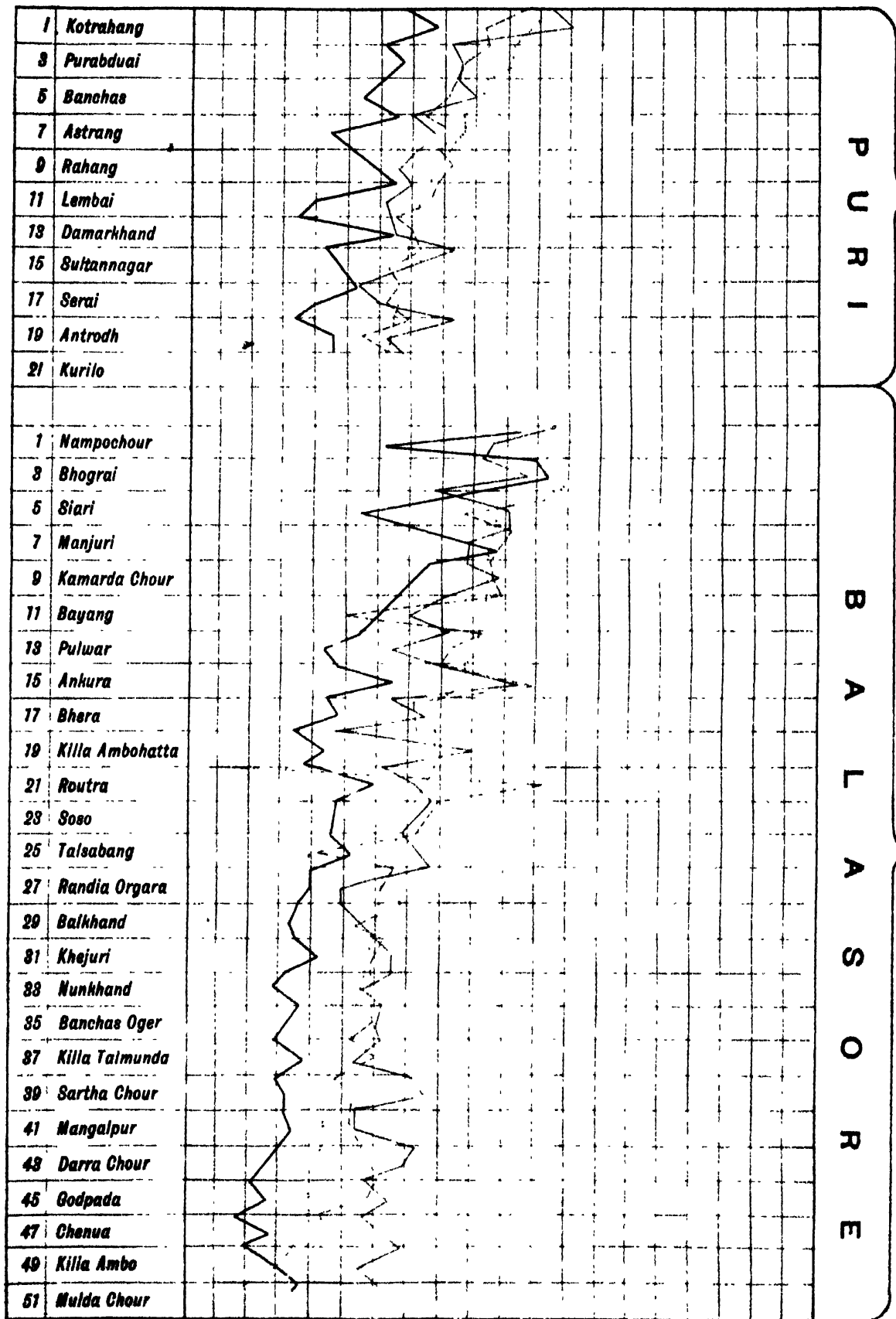
REFERENCES.

Thani rents at last settlement
Thani rents as now settled

**COMPARATIVE INCIDENCES OF THANI AND PAHI RENTS AND OF THE RENTS OF
SETTLED AND OCCUPANCY RAIYATS AS SETTLED AT THE LAST
AND AT THE PRESENT SETTLEMENT.**

**NAME OF
PARGANA.**

100
100
100
100



REFERENCES.

Thani rents at last settlement
Thani rents as now settled
Pahi rents at last settlement

Under-raiyats pay on an average Rs. 3-1-7 per acre in Cuttack and Re. 1-15-8 per acre in Balasore; this is, as it should be, a little, but not very much, higher than the incidence of raiyati rents in the two districts.

Tenants holding under Government pay in Cuttack Rs. 4,019 for 933 acres, an average of Rs. 4-5-6 per acre, but the area is small and a good deal of valuable *chati* land is included. By *chati* land is meant land occupied by lodging houses on the Trunk Road. It is not easy to compare the rents with actual produce. I have estimated* that the average outturn of an acre of rice land is in ordinary years 12 maunds of rice worth about Rs. 27, and to this we may add Rs. 3 for straw and bye-products, making a total of Rs. 30. At this rate the rent would average less than one-thirteenth of the total produce. The rates of rent are, however, not economically adjusted to the value of the land. Rates are generally fixed at so much per *gunth* ($\frac{1}{8}$ of a *maun*), and in the highly rented parts of the Province the commonest rates are Rs. 6-4 to Rs. 4-11 per acre for the best class of land, Rs. 3-2 for second class *sarad* or first class *biali* and Re. 1-9 or Rs. 2-5-6 for third class lands.

The rents are thus more or less proportional to the total outturn, and consequently leave, after deducting expenses of cultivation, a very much larger profit on good than on poor lands.

526. In the two diagrams annexed I have endeavoured to show in a graphic form the variation between *thani* and *pahi* rents at the last settlement and those now settled, Pargana by Pargana, arranged in a descending scale according to the incidence of *thani* rents at the last settlement.

It will be seen that the tendency has been to an equalisation of rent rates. In the Parganas where *thani* rents were highest at the last settlement, *pahi* rents have not risen up to them even after 60 years, but in the areas formerly most backward *pahi* rents are generally above *thani*. The same tendency is observable in the case of the surviving pure *thani* holdings, the most heavily assessed holdings having lapsed into *pahi* or *thani-pahi*. Almost everywhere, rents of *pahi* raiyats as now settled are higher than at the last settlement, the difference being fairly constant except in Balasore District which shows a much greater development in the low rented than in the high rented areas. Complete figures for incidences will be found in Appendices EA, EB, and EC, and I have only a few remarks to make on the peculiar variations brought out by the diagram.

Beginning with Cuttack we find that in the 18th Pargana, Tapankhand, there has been a great fall in the *thani* incidence, and settled *pahi* rents are only Rs. 2-2-4 per acre against Rs. 2-0-2 at the last settlement.

Half of this Pargana consists of a swamp, and much of it is high with a laterite soil, and its physical disabilities joined to the great increase in cultivation account for the small increase in incidence. In the next Pargana—Olas—*thani* raiyats at the last settlement refused to accept *pattas*, and all the highly assessed lands have been merged in *pahi*, which is a sufficient explanation of the falling off in *thani* rents. In Bantara, the 22nd Pargana, much of the *pahi* land, especially that recently brought under cultivation grows only *dalua* paddy and pays very light rents, so that the average incidence of the settled rents of *pahi* raiyats is only Re. 1-11-10 per acre as against Rs. 3-2-11 for *thani* at the last settlement. The *thani* incidence has not fallen, the lands being to a great extent in the hands of *Gours* (*Goalas*), who make money as personal servants. In Bargaon No. 53, and Panikhand No. 54, the fall is due to heavy floods and a deposit of sand. Instances of a large increase are in Bardiala, No. 63, where *pahi* rents have risen from Re. 1-6-2 to Rs. 3-0-5 per acre, owing principally to good management; Tikan, No. 47, where, owing to protection and the improved communications, *pahi* rents have risen from Re. 1-4-5 to Rs. 3-4-0 per acre, and Utikan, where they have risen from Re. 1-5-9 to Rs. 2-12-11 per acre.

Turning to Puri we find the variations smaller, but the general increase in *pahi* rents less.

In two Parganas, Sorai and Matkatputna, the incidence of *pahi* rents is a fraction below that at the last settlement; in two others, Lembai and Astrang, the increase is very small. In the first two the falling off is accounted for by the prevalence of disastrous floods; the same is the case in Astrang

* See para. 187.

in a less degree, but in Lembai (Delang *takuk*) it is largely due to mismanagement.

In Balasore we find the greatest variations in the rents of *thani* as now settled. A very great deal of the *thani* land has lapsed and the small areas surviving show great variations. In Nampachaur, Sahabander, Matkatabad and Jalang all the *thani* has disappeared. In Bhograi Sahabunder, Manjuri, and Katisahi, all very small areas, the former assessment was probably too high and the incidence has fallen; elsewhere there has been a steady but not very remarkable increase.

527. Raiyats without rights of occupancy represent but a very small fraction of the whole number, and hold only some 23,000 acres; much of the land shown under this

Non-occupancy raiyats. heading had been only recently taken up and had not yet been assessed to rent, consequently the average incidence of the existing rents was low, only Re. 1-7 per acre, and the enhancements made come to nearly 36 per cent.

Rents are below the general average of the Province, partly because some of the land is very inferior, and partly because easy terms were generally allowed to persons breaking up lands for the first time.

528. Some 27,000 acres of homestead lands were at the last settlement assessed as *chandina* at an average of Rs. 2-14 per acre, the incidence being as high as Rs. 5-4-7 per

Chandina. acre in Puri and as low as Rs. 2 in Balasore. Looking to the very much larger *chandina* area in Balasore than in the other two districts combined, it appears that the low assessment must have been due to the inclusion in *chandina* of a larger area of inferior land outside the actual village site. This explanation is borne out by the fact that in Balasore it is not uncommon to find tenants described as *chandinadar* in the last settlement papers, but having *pattas* of the nature of *thani pattas* for agricultural lands (*chandinadar kudelu patta*).

Though *chandina* tenants had their rents fixed for the term of settlement most of the holdings have now become merged in the *pahi*, and only the more valuable sites are still assessed as *chandina*. This accounts for the great rise that there has been in the incidence of the surviving holdings. In the present settlement a few enhancements have been made in the rents of town lands, but generally speaking *chandina* rents in agricultural villages have been left alone.

The enhancements come on the whole to only Rs. 700, or 1-7 per cent., and the incidence of the settled rents is Rs. 4-8 per acre.

The rates now recognised by zamindars for homestead land are from 4 annas to 8 annas per *gunth*, or say from Rs. 6-4 to Rs. 12-8 per acre, so the *chandina* raiyats may be held to have got off lightly. The above rates would of course apply to town and semi-urban areas and to the more populous Parganas of Cuttack and Puri; the incidences of *chandina* rents in villages off the Trunk Road rarely rise above Rs. 3-2 per acre.

529. *Chaukidars* have been nominally assessed at full rates, but in practice it was found expedient to allow small deductions. The 20,200 acres resumed were therefore assessed at Rs. 43,000, or Rs. 2-2 per acre, being on an average three annas per acre less than ordinary raiyati land.

As a rule the *jagir* lands are of the same class with *thani*, and are certainly not below the general average of the lands of the village.

530. This includes 6,900 acres of *paik* and *khandaiti jagir* assessed at Rs. 5,100, an average of twelve annas per acre, i.e., at half rates during the lifetime of the present holders.

Other *jagirs* resumed. The remainder is *patwari* and *chakran jagir* assessed at full rates. The *jagirs* of *khandaits* and *paiks* were of course resumed by consent, and it was necessary in certain areas to carry the resumption through by certain concessions. Government have permitted the present holders to sit at half rates for their lifetime.

531. These two headings apply to the various grants made by zamindars at a low rent, or more often free of rent, to tenants newly assessed and tenancies valued for revenue. servants, kinsmen and retainers; the difference being that while the holdings shown as "newly assessed" have been resumed and assessed to rent, the others have only

been valued, leaving the zamindar to make his own terms with the incum-bents. In both cases the assessment is below the average incidence of *pahi* rents chiefly because a large portion of these lands lies in the *hill* estates where rents are low, and partly also because some leniency was naturally shown to persons assessed for the first time.

532. One hundred and seventy-two thousand and five hundred acres, or about one-eleventh of the whole assessed area, is cultivated by the proprietors and proprietary tenureholders, or sublet by them as their private (*nij-jot*) land. This has generally been valued at the village rate, and on the whole the assessment comes to Rs. 2-4 per acre, which is one anna less than the average incidence of occupancy raiyats' rents. It is not, however, a fact that such lands are as highly assessed as *pahi*, and there is in most villages a difference of a couple of annas in the incidence. That, on the whole, the incidence is so nearly equal is due to the larger proportion of such land in the more highly assessed District of Cuttack, where it forms more than one-tenth of the assessed area.

There is no reason to suppose that the average letting value of these lands differs much from that of the raiyati land; for while they comprise a certain number of inferior fields thrown on the landlord's hands, it is equally certain that petty proprietors and sub-proprietors generally hold the best lands of the village in their own possession.

The actual profit derived by the proprietor from his *nijchas*, whether he cultivates by his own servants or sublets on a produce rent, is of course greater than the valuation, which represents only the sum he could obtain by letting to an occupancy raiyat at a cash rent.

At first it was proposed to undervalue all lands in the direct cultivation of proprietors, and hopes of concessions not exceeding one-fourth of the total were held out to the proprietors, but when the settlement of revenue began, the Commissioner and the Board took exception to such deductions as obscuring assets, and it is only where good proof of inferiority of land or liability to loss of crops has been given that the final assessment of the *nijchas* has been made at less than the village rate.*

In the tobacco growing country, where the best lands were held by the proprietors and collusion was suspected, an assessment at more than the village rate has been made. The same has also been the case where proprietors were found to have dispossessed *thani* raiyats, or by other such means to have got the most valuable lands into their possession.

533. So far I have been discussing only cash rents, but a good deal of land still pays a rent in kind. Practically there are but three forms of produce rent known in

Oriassa: the commonest is *dhulibhag*, in which landlord and tenant share equally in all the produce of the land; the most prevalent after this is *sanja*, meaning a payment of a fixed quantity of agricultural produce; the third form is *panidhan*, in which a portion of a rent fixed in cash is payable in grain at the current market rate. We also find (very rarely) *dekhamona*, a form of *sanja* or fixed proportion of the produce if the outturn is normal, but if the crop is scanty remissions are given. I will consider these three classes in order.

534. *Dhulibhag* means literally a "sharing of the dust," and implies an equal division of the grain as well as of all bye-products. Under this system the entire cost of cultivation is borne by the

tenants, and when it comes to maturity, the crop is reaped in the presence of the landlord's agent and carried by the tenant to the threshing floor, where an equal division is made in the presence of both parties.

The tenant thus gets as his share a bare half of the produce less all ~~taxes~~, the only contributions made by the landlord being the payment of the water rate, if any, and the giving of advances of seed, to be recovered in addition to his ordinary half share of the crop.

In the case of ordinary rice land the landlord's share may be put at over 8 maunds of paddy, worth at harvest time Re. 1 to Re. 1-4 per maund, so that the rent is equivalent to Rs. 8 to Rs. 10 in cash. When to this high rent

* Appendix A (17) and Appendix C, Part I.

† Settlement Officer to Director of Land Records and Agriculture, No. 1239 of 6th May, 1903.

is added the popular idea that a produce-paying raiyat is a mere tenant-at-will, incapable of acquiring occupancy rights, it is not surprising that the tenants have been as eager to prove payment of cash rents as the proprietors have been to claim produce rents. It is impossible to say to what extent produce rents prevail, as in very many cases tenants holding on such terms have allowed the land to be recorded as the *nijhas* of their landlord. Sometimes, instead of actually taking half the product, the crop is appraised on the ground and half the estimated value taken in cash; this is known as the *kuta* system.

It is common enough for raiyats to pay produce rent on a small portion of the holding, and where such rent has been recorded in the case of a tenant paying directly to the zamindars or sub-proprietors the value has for the purpose of calculating the revenue been taken at the village rate. Separate figures showing the area for which such valuations have been made are not available, but I do not think it can exceed 2 per cent. of the total rent-paying land. *Dhulibhag* is, however, commonest in the case of under-raiyats and tenants of *lakhurajdars*.

The area on which it is paid by these classes of tenants in Balasore is 16,500 acres.

In Cuttack, in the 450 villages for which figures have been compiled, 4,563 acres or 1·7 per cent. of the area pays *dhulibhag*, and this would give 20,500 acres for the whole district.

535. *Phalbhag* or *rajbag*, meaning a division of the fruits or grain only, the straws or other bye-products being left with the cultivator, is a less common form of produce rent.

Phalbhag.

The figures for it are included in those for *dhulibhag*.

536. *Sanja* means a contract, and is used of a rent in kind fixed at a certain quantity, payable good season or bad. It is very rare in both Cuttack and Balasore, but

Sanja.

common throughout the Puri district. In Balasore non-mahal tenants pay *sanja* for about 500 acres, and I think the total *sanja*-paying area within the temporarily-settled estates of these two districts is less than 2,000 acres. The *sanja* is fixed at so many *gaunis* or *pautis* of paddy, *kulthi*, or other grain per *gunt* with in many places some molasses or tobacco leaves. In Balasore Mr. Kingsford, taking the price of paddy at Rs. 1-2 per maund, finds the money value of the *sanja* to vary from Rs. 3 per acre in the case of under-tenants to Rs. 4-8 per acre in the case of tenants of *lakhurajdars*. In Cuttack and Puri the *sanja* varies from 1 to 2½ *gaunis* per *gunt*, or say from three maunds to eight maunds per acre. The average is about six maunds to the acre, worth in a good year Rs. 6 and in bad about Rs. 9. It thus presses most heavily on the raiyat just when he is least able to afford it.

537. *Dekamona** has been already explained. I have only found it in the Puri district. It is probably due to the interference of Mr. Wilkinson, who did so much for

Dekamona.

the raiyats of all kinds in the way of providing remissions.

538. *Panidhan* or *kaththan*† is an arrangement whereby a part of a cash rent is payable in kind, e.g., a tenant with a

Panidhan.

nominal rent of Rs. 4 may have to pay Rs. 3 in cash and give also one rupee's worth of grain. The landlord fixes the rate, so that the tenant generally has to pay something more than he could sell for the same money in the open market.

539. Though Section 40 of the Bengal Tenancy Act has been extended to Orissa, very few applications have been received for the commutation of produce rents. Landlords

Commutation.

as a body preferred produce rents, and tenants were slow to avail themselves of their new privilege. Indeed, in the case of *dhulibhag*, the cash equivalent of the rent was so high as to effectually deter applicants who would have found a fixed rent of eight or ten rupees more difficult to pay than half the produce.

In one instance a produce rent was converted to a cash rent of Rs. 9-6 per acre, and the landlord was still dissatisfied and wanted more.

* The Special Judge has in a recent appeal ruled that such a form of rent is not recognised by any law.

† Locally known also as *reshi* and *sakan*.

540. There is a very marked difference between the three districts, which is summarised in the following statements and incidences.—

District.	Increase per cent. of existing over last settlement assets.	Increase per cent. of settled over existing assets.	LAST SETTLEMENT INCIDENCE.				PRESENT SETTLEMENT INCIDENCE.			
			Mu'asasi jama.	Thana rents.	Pahi rents.	Nij Jot.	Mu'asasi jama.	Thana.	Occupancy riyata.	Proprietors lands.
1	2	3	4	5	6	7	8	9	10	11
Cuttack ...	65	12	1.13	2.13	1.15	1.12	2.8	2.14	2.14	2.10
Puri ...	30	12	1.7	2.1	1.8	1.13	1.12	1.15	1.15	2.6
Balasore	72	16	1.3	1.11	1.3	1.4	1.11	1.13	1.13	1.12

DISTRICT.	Number of hold- ings at present settle- ment excluding under ryats and tenure- holders ryats	AREA ASSESSED.		ASSETS.						INCIDENCE OF RENTS PER ACRE.			
		At last settle- ment.	At present settle- ment	At last settle- ment.	At present settle- ment.		Difference between assets.		At last settle- ment.	At present settle- ment.			
					Existing	Settled.	Past and existing.	Existing and settled.		Existing.	Settled.		
1	2	3	4	5	6	7	8	9	10	11	12		
		Acres.	Acres	Rs.	Rs.	Rs.	Rs.	Rs.	Rs. A. P.	Rs. A. P.	Rs. A. P.		
Cuttack	660,000	621,000	832,800	11,21,000	18,47,400	20,72,500	+ 2,25,100	+ 2,25,100	1 14 0	2 6 0	2 8 0		
Balasore	370,250	404,200	692,200	5,75,000	9,88,000	11,61,400	+ 4,13,400	+ 4,13,400	1 2 8	1 6 10	1 10 7		
Puri (without Khurda)	204,000	302,000	373,300	4,41,000	5,73,000	6,33,400	+ 1,31,800	+ 76,000	1 7 4	1 8 7	1 11 7		
Total	1,230,250	1,416,000	1,898,300	21,38,200	34,08,400	38,67,300	+ 12,71,000	+ 4,56,100	1 8 0	1 13 0	2 1 0		

It is thus apparent that while the incidence of the assessment of Puri was at the last settlement higher than that of Balasore, not only has there been a far greater extension of cultivation in the latter district, but rent rates have been nearly equalised in the two.

In Cuttack, on the other hand, the former assessment was much higher than in the other districts, yet rent rates have risen during the term of settlement to a greater extent than in Puri.

In Balasore the comparatively low assessment appears to have been due in part to the disastrous floods of 1831 which had thrown much land out of cultivation, and partly to the scantier population. Even now, after 60 years of development, the population, according to the last census returns, is only 481 to the square mile in Balasore against 533 to the square mile in Cuttack. Some difference is also to be put down to the larger area in Cuttack which is twice cropped, and to the greater amount of protection from flood and drought. In Balasore for the most part the cultivated area consists of *sarad dhan*, and grows only one crop. Lastly, in Cuttack zamindars, managers and *gumbasthas* are better educated and better skilled than in most parts of Balasore. Even with all these allowances it still appears that Balasore is more lightly assessed than Cuttack. The reason for the lower rents at the last settlement in Puri than in Cuttack is, I think, to be traced to the greater liability of many parts of the district to flood and drought, particularly to the latter. The returns of 38 years show that the average annual rainfall in Puri is 58.85 inches against 60.87 in Cuttack and 66.34 in Balasore, and the fall is very unequal in different localities.

Something also may be put down in Puri to the personality of the Settlement Officer, Mr. Wilkinson, whose assessments were most marked by moderation.

The rise in rents during the settlement now expired has been far less in Puri than in the other districts. Cuttack no doubt has enjoyed greater advantages in the matter of protection and irrigation, but, as I shall shortly show, the increase in rents is by no means confined to those favoured tracts,* and the incidence of the *pahi* rents in the inundated Parganas bordering on Puri has risen from Re. 1.15 to Rs. 2.7 per acre.

* See also Chapter V, *supra*

On the other hand, in Puri the incidence of raiyati (*pahi*) rents has risen only from Re. 1-8 to Re. 1-15 per acre, and this small increase is to be accounted for by the liability of the district to damage by floods and by salt from the Chilka Lake. Again, in Puri the privileged tenants, especially *basyaftidars*, were assessed at the last settlement to much higher rents than elsewhere, the average being nearly As. 10 per acre against As. 6 per acre in Cuttack; also in more than 25 per cent. of the assessed area rents fixed for the term of settlement have survived.

It is probable, I conclude, that for the most part this difference in incidence and development of rents represents a real superiority in the soil of Cuttack, but it is also certain that in parts of Puri petty proprietors and tenureholders holding large areas in their immediate possession have found it to their interest to understate rents, while some estates, such as Delang, are so mismanaged that the proprietors have no proper rent roll. In fact, the proprietor of Delang (the Puri Raja) has, I understand, appointed a succession of *gumasthas* who have been successively dismissed after plundering the raiyats and without rendering any accounts.

541. The enhancements made in this settlement are equal in Cuttack and Puri (*i.e.*, 12 per cent.) and one-third more in Balasore, the difference being chiefly in the larger amount of excess area in the last district. It is possible that the enhancements for excess area would have been larger in Puri and Cuttack, but attestation had to some extent to be made twice over, and zamindars filed revised *ekpadias* giving in many cases the areas for their tenants as recorded in the survey papers. Thus there was less excess area. In Balasore no re-attestation was done, and on the whole the papers of the zamindars were even less up to date than those of the zamindars elsewhere. In addition to this fact also the progress of extension of cultivation is still very rapid on the east and west of the District.

542. The number of tenants for whom rents were settled in the Province (excluding Khurda) amounts to 1,501,869, and from this number it is necessary to exclude 49,307 *nijchās* holdings in respect of which valuation for revenue has been made.

The balance is 1,452,562, dealt with as follows:—

		Per cent.
Rents increased for excess area	1,8,607	or 13
„ reduced for loss of area ...	46,699	or 3
„ newly assessed ...	87,167	or 6
„ altered on other grounds	318,717	or 24
„ retained ...	781,072	or 54
Total	1,452,562	

We must, however, not lose sight of the fact that out of 15 lakhs of tenants only 1,225,060 are paying direct to the proprietor or proprietary tenureholder, *i.e.*, nearly three lakhs of under-tenants or tenants of tenureholders are included in the figures. In the large majority of these cases no application was made for settlement of rent, and the existing rent was generally settled unless it was *prima facie* inaccurately recorded. The results of interference in existing rentals may therefore be expressed as follows:—

		Lakhs.
Total	...	12.25
Deduct	...	5 <i>nijchās</i> .
Balance	...	11.75

out of which rents were retained in the case of not more than 6 lakhs or about 50 per cent.

It may be generally stated that the rents of *pahi* settled raiyats in a village have not been altered except—

- (a) Where a particular raiyat was found to be paying rent the incidence of which was 25 or 33 per cent. less than the general incidence and there was no good reason for payment of the low rent.

- (b) Where the area held by the raiyat was found to be less by 10 per cent. or more by 10 per cent. than the area for which he was found to be paying rent to his landlord.
- (c) Where the raiyat had hitherto paid no rent and could show no valid reason why he should not do so.
- (d) Where his landlord specially applied for enhancement.

As regards alteration of rents in 1896-97 the figures of rents retained was 56 per cent. This is due to the fact that a large area of Cuttack was dealt with in which there were many under-tenants whose rents were retained and to the fact that Sir A. Mackenzie's amended rules did not take effect till the end of the field season. In 1897-98 and 1898-99 the percentages fell to 51 and 49 partly owing to the large increase of cultivation in Balasore and partly owing to a more thorough working of the amended rules.

The record of the number of raiyats who did not attend and whose rents were either maintained *ex-parte* or enhanced *ex parte* after service of special notice was not accurately kept till the last two field seasons. Out of nearly 4½ lakhs of tenants whose rents were settled during these two years the rents of less than 6,100 were maintained and of less than 2,300 were enhanced *ex-parte*. I do not vouch for the strict accuracy of these figures, but they do tend to show that attendance was good and that great pains taken to secure the appearance of absentees. It must also be mentioned that inspecting officers took considerable trouble to ascertain, at the time of local inspection of Assistant Settlement Officers' camps, that raiyats were not being harassed by infringement of the rule to hold camp within three miles of the furthest corner of a village.

I append a statement of appeals, from which it will be seen that raiyats were generally satisfied with the work of Assistant Settlement Officers:—

Total number of appeals	295
Dismissed for default	17 or 5.75 per cent.
Decisions upheld	159 or 50.94 "
Decisions modified	8 or 2.71 "
Decisions reversed	48 or 16.27 "
Remanded for re-trial	72 or 24.40 "

Most of these appeals were against decisions as to possession or title, and but a very small proportion against the rents settled.

543. It now remains to compare rents in smaller local areas, and for this purpose figures have been given showing the incidences of rents and developments of assets and cultivation in each Pargana (Appendices DA and EA).

I have further grouped the Parganas of each district into Blocks with more or less homogeneous features, and for each such block a complete statement of assets past and present will be found in the Appendices AB, AC, etc., down to CN.

To begin with Cuttack, I have divided it, starting at the north-west corner into eleven groups, and the figures for these groups are given in the Appendices.

The first group consists of the four temporarily settled *hillaat* estates of Ragri, Balarampur, Chausathipara and Kantajhar. All four were at the last settlement backward tracts covered with jungle and more akin to the *garhjats* than to the settled Parganas of the District.

The assessments were purposely made in a most lenient spirit, especially in the case of the many invalid grants to the kinsmen and retainers.

In this settlement it was found that Kantajhar, which had passed into the hands of the Maharaja of Keonjhar, was in much the same condition as other temporarily settled estates, while Ragri and Chausathipara, though still managed under a patriarchal system, were opened up and well cultivated; Balarampur, however, was still far behind the neighbouring Parganas in development.

Over the whole block, cultivation had extended by more than 60 per cent., and the incidences of raiyats' rents had been trebled. It was found, however, that rents had rarely been collected from the tenures resumed at the last settlement, and it was only after many remonstrances that the *bazgaftidars*

consented to have their rents enhanced as in other parts of the District. Their rents were raised eventually from Rs. 647 to Rs. 1,786, and the incidence from As. 4 to As. 10 per acre. Nearly all *thani* holdings were found to have lapsed and the *pahi* area to have increased from 2,900 to 7,900 acres, while the average incidence had risen from As. 9 to Re. 1-11. Further enhancements were made on account of excess area and rents settled at an average of Re. 1-14 per acre. Lands in the possession of the proprietors were often valuable, and have been assessed at an average of Rs 2-3 per acre. More than 8,500 acres were held by kinsmen and hangers-on of the proprietors either rent-free or on quit-rents. Of these over 7,000 were valued for revenue purposes at a total of Rs. 12,089, while another 1,400 acres were, with the consent or on the application of the occupants, assessed to rent at an average of Rs. 2 per acre.

By these operations the last settlement *mufassal jama* has been raised from Rs. 5,572 to Rs. 31,998, or by 510 per cent.; but of the assets only some Rs. 20,782 are recoverable by the proprietors, the rest having been alienated in various ways.

Block B comprises the nine Parganas of Shergarah, Jajpur, Dolegram, Katia, Tisania, Matkatabad, Sahelnagar, Manjuri and Ahyas lying on the south of the Baitarani

river. The first of these consists for the most part of a high and comparatively sterile rice plain. The others are for the most part protected and to a considerable extent irrigated, though only one of very recent years. To the east, much of Dolegram, Ahyas, Katia and Tisania is very low and liable to inundation through breaches in the Kharsua embankment and by the back-water of the Baitarani. The low lands have benefited by protection and irrigation, especially the very low *dalua* lands; it is not so certain that the floods were not on the whole beneficial to the higher land.

At the last settlement the assets of this block were Rs. 1,54,600, and the average incidence per acre Re. 1-7, *thani* rents averaging Rs. 2-5 and *pahi* Re. 1-10 per acre.

During the term of the settlement there was but a small lapse of privileged tenures, but seven-eighths of the *thani* holdings merged into *pahi* or became combined with it to form *thani-pahi* holdings, with a falling off of an anna per acre in the incidence. *Pahi* rents had on the whole block meanwhile risen above *thani*, though in the flooded Pargana of Ahyas and in the high lands of Sargarah they were still a few annas lower.

In the present settlement raiyati rents were found to be generally high enough and were only enhanced from 5 to 7 per cent., the incidence of the rents as settled being Rs. 2-9 for occupancy raiyats and Rs. 2-6 per acre for *thani* and *thani-pahi*. Probably the latter could have stood some further enhancement, but it was part of the policy of this settlement to treat with leniency the ancient occupiers of the land.

Over 2,100 acres of *jagir* land have been resumed and settled at rather lower rates than raiyats are paying, and 2,430 acres of invalid assignments by zamindars were either assessed to rent or valued for revenue. More than 19,600 acres, nearly a seventh of the assessed area, was held as private land by proprietors and proprietary tenureholders; it has been valued at an average of Rs. 2-9 per acre, the same as the incidence of the settled rents of raiyats. The assessment may be taken to represent the full letting value of the land.

As the results of these operations the new *mufassal jama* of the block is Rs. 3,18,400, i.e., 12 per cent above that recorded as existing at the beginning of this settlement and 106 per cent. in excess of that fixed at the last settlement. At the same time the assessed area has increased from 106,800 to 141,900 acres, or by 33 per cent., and the incidence of the *jama* per acre from Re. 1-7 to Rs. 2-4. The increase is therefore above the average, but the incidence of the assessment is below the average of the district. This is accounted for by the inferiority of the lands of Sargarah and Ahyas.

The third block consists of three Parganas at the mouth of the Baitarni and Kharsua—Bautara, Kaima and Barha, all low-lying saline tracts growing chiefly *dalua* and *sarad* rice. The people depend to a considerable extent on fishing and large numbers emigrate to Bengal, where they serve as bearers and *chaprasis*.

Block C.

The assessment made at the last settlement was low, only Re. 1-11 per acre on *thani* lands and 15 annas on *pahi*.

More than half of the *thani* lapsed completely and some was combined with the *pahi* to form *thani-pahi* holdings, while the incidence came down to Re. 1-8 per acre, and that of *pahi* rose to Re. 1-8 per acre. In the present settlement only very trifling enhancements were made, viz., 6 per cent. on the existing *thani*, 2-3 per cent. on the *thani-pahi* and 5 per cent. on the *pahi* rents.

Privileged tenures had for the most part survived only some 300 acres out of 2,600 having lapsed. Owing to the low rate of raiyati rents the enhancements were less than usual, being only 137 per cent. in the case of *nisfi buzayfti* and 43 and 57 in the case of *kamil buzayfti* and *kharida jamabandi*. The incidences per acre of the rents settled for these three classes were As. 13, As. 14, Re. 1-1, respectively.

House-sites in such an area were valuable and rents of *chandinas* therefore averaged Rs. 5 per acre. Out of 116 acres, however, only 48 acres have survived.

The proprietors' private lands made up over one-fourth of the assessed area and in view of their liability to damage by floods and drought have been assessed at an average of only Re. 1-4.

On the whole the result of this settlement may be summed up as follows :—

Assessed area at last settlement	17,000 acres.
Assessed area at this settlement	20,700 „
Increase of assessed area ...	22 per cent.
<i>Mufassal jama</i> at last settlement	Rs. 17, 700.
Ditto at this settlement	Rs. 29, 500.
Increase of <i>mufassal jama</i> ...	66 per cent.
Incidence at last settlement . .	Re. 1-1 per acre.
Incidence at this settlement ...	Re. 1-7 „

The low incidence and small increase appears to be fully accounted for by the nature of the country, but it is probable that with the canalisation of spill channels there will in future be a great extension of *dahua* cultivation.

In the fourth block I include Parganas Jodh, Olas, Baruan, Kalamatia, Hatimunda, Sultanabad, Alti, Baragaon, Kuhunda Jaipur, Dihl Arakhpur, forming the great spill area of central Cuttack enclosed between the Kharsua embankment on the north and the Patamundai canal on the south-west and flooded by the Kharsua, Bramhini, and Birupa and their branches.

Part is of course protected and a little in Alti irrigated, but on the whole these Parganas may be said to be liable to frequent damage by flood and more rarely by drought.

At the last settlement rates were high in this block, *thani* rents averaging Rs. 2-14 and *pahi* Rs. 2-6 per acre and this in spite of considerable reductions in the pre-existing rates. A good deal of the *thani*—as in Olas—was not engaged for, and less than a sixth now survives as pure *thani* and about a half as *thani-pahi*. The incidence at the same time fell off, and at the beginning of the present proceedings *thani* rents averaged only Rs. 2-7 and *thani-pahi* Rs. 2-9 per acre, while the incidence of *pahi* rents had risen to Rs. 2-12 per acre. The difference I ascribe not to any superiority in the pure *pahi* lands, but that *thani-pahi* rents were fixed many years ago and were much more difficult to enhance afterwards than those of the ordinary tenant-at-will.

In this settlement *thani* rents have been raised by 11 per cent, *thani-pahi* by 4 per cent. and *thani* occupancy raiyats' rents by the same amount; the average incidence of the settled rents per acre being for the first two classes Rs. 2-11 and for the third Rs. 2-14. Non-occupancy raiyats' lands, being generally newly reclaimed and inferior, are assessed at only Rs. 2-7 per acre. It is to be noted that the smallness of the enhancements of *pahi* rents in this block is due to the fact that in some villages of Olas, Baruan, Kalamatia, and Kuhunda Jaipur very considerable reductions had to be made on account of the deposits of sand left by the floods of recent years, culminating in the heavy

floods of 1896. In this block there has been very little lapse in the privileged tenures except in the case of resumed *jagirs*. The *nisfi bazyafiti* rents have been enhanced by 156 per cent and are settled as Re. 1-2 per acre. *Kamil bazyafiti* is enhanced by 50, and *kharida jamabandi* by 78 per cent. *Chandina* rents averaged Rs. 4-5 per acre, and a little over a third survives to this day and pays an average of Rs. 4-10 per acre.

The proprietors and tenure-holders are in possession of only one-twelfth of the assessed area. This small portion is due to the fact that Kalamatia, Alti, Baragaon and Dihi Arakhpur contain large estates for the most part *hastabud* and that some of the principal proprietors are non-resident.

The results of the settlement of this block may be summed up as follows:—

Assessed area at last settlement	...	...	88,100 acres.
Assessed area at the present settlement	...	...	1,27,400 "
Increase of assessed area	...	...	44½ per cent.
<i>Mufussal jama</i> at last settlement			Rs. 1,67,100
Ditto at this settlement			Rs. 3,26,400
Increase of <i>mufussal jama</i>			95 per cent.
Incidence at last settlement			Re. 1-14-0 per acre.
Incidence at this settlement			Rs. 2-9-0 "

Thus both the actual incidence of the assessment and the increase in cultivation in *mufussal jama* and in the incidence of the *mufussal jama* is above the average of the District.

This can only be accounted for by the excellent harvest obtained in good years and the large area twice cropped; in bad years a large part of the rents is irrecoverable, but is generally carried on for realisation in a good year.

In Block E, I include the Parganas on either bank of Range No. 1 of the High Level Canal—Keruakhand, Kanchikhand, Kokuakhand Tapankhand, Dalijora and Panikhand.

Of these the first three are for the most part protected and irrigated. Dalijora is a rather wild and backward tract covered with hills and jungle, while Tapankhand consists partly of a laterite plain and partly of a low-lying swamp at the foot of the Dalijora hills. Panikhand is a small temporarily-settled estate on the borders of Atgarh and considerably damaged by the floods of the Mahanadi. The *thani* lands of this block were assessed at an average of Rs. 3-3 per acre, and about a third still survives as pure *thani* and a fifth as *thani-pahi*. The high rate was due partly to the fertility of lands in Kokuakhand and Keruakhand and partly to the inclusion in *thani* of a large area of valuable homestead land. The incidence fell off during the settlement to Rs. 3 for *thani* and Rs. 2-10 for *thani-pahi*.

The incidence of *pahi* in the meantime had risen from Rs. 2-2 to Rs. 2-11 per acre. Rents were generally so high that there was no room for further enhancement, and after deducting the amounts reduced in Panikhand and along the banks of the Birupa, where embankments had changed the nature of the land, the enhancements are only 3 per cent. for *thani* and for *pahi*, and 3-6 per cent. for mixed *thani pahi* holdings. It is to be observed that there is great variation in the rates in this block, the incidence of the settled rents of occupancy raiyats per acre varying from Rs. 3-6-2 in Keruakhand, Rs. 3-2-2 in Kokuakhand, Rs. 2-8 in Dalijora and Rs. 2-2-2 in Tapankhand and Rs. 2-0-4 in Panikhand. The differences are due to differences in the fertility of the land and in the advantages enjoyed in the matter of protection, irrigation, and communications. The privileged tenures in this block were rather highly assessed, but have nevertheless survived with the loss of about 280 acres of *kamil* and 60 acres of *nisfi bazyafiti*. The enhancements made are below the average, viz., 142 per cent. for *nisfi bazyafiti*, 46 per cent. for *kamil* and 38 per cent. for *kharida jamabandi*. The incidence of the settled rents is, however, above the average for the District.

Chandina lands were very highly assessed at Rs. 5-14 per acre and two-thirds of the original area still survive and pay Rs. 5 per acre. About one-thirteenth only of the area is held by the proprietors, some of whom, as those of Dalijora, are non-residents. The assessment at Rs. 2-9 per acre is probably equal to the letting value of the lands of which some are certainly inferior.

The large *sairat* assessments are chiefly for forest produce in Dalijora and Tapankhand and for the extensive fisheries of Panikhband.

The results of the settlement may be summed up as follows:—

Assessed area at last settlement	...	22,400 acres.
Assessed area at the present settlement	...	28,700 "
Increase of assessed area	...	28 per cent.
<i>Mufassal jama</i> at the last settlement	...	Rs. 43,900.
Ditto at this settlement	...	Rs. 76,000.
Increase of <i>mufassal jama</i>	...	55 per cent.
Incidence at the last settlement	...	Rs. 2-3 per acre.
Incidence at this settlement	...	Rs. 2-10 "

It will be seen that the increase both of cultivation and of assots is below the normal. Very little land is left for reclamation except in the jungles of Dalijora and the plains (Benapat) of Tapankhand. The assessments of the good lands on the south of the canal was already so high at the last settlement that there was little room for increase, and the general incidence of rents is kept down by the inferiority of the lands west of the canal.

Block F contains the principal Parganas protected and irrigated by the Kendrapara Canal system, viz., Saraswati, Karimul, Padampur, Sungra, Matkatnagar, Asureswar, Chaudakulat, and Nahakhand.

The first and last three were at the last settlement exposed to flood, but the others were for the most part protected and represented the most advanced area in the District.

Thani rents averaged Rs. 3-5 per acre and, even so, more than half has survived as pure *thani* and another sixth is in mixed *thani-pahi* holdings. The incidence fell in the case of pure *thani* to Rs. 3-1 and of *thani-pahi* to Rs. 2-13 per acre. *Pahi* incidence, however, had risen from Rs. 2-2 to Rs. 3-4 per acre. It is reasonable to suppose that part at least of the higher rents of pure *pahi* may be ascribed to enhancements made by the zamindars on account of the advantages conferred by protection and irrigation, but it will be seen from Appendices AG. that in Sungra and Asureswar *pahi* rents are still lower than in the *thani*, and in Matkatnagar, Nahakhand and Chaudakulat the rates are nearly equal.

The enhancements made by the present proceedings were from 3 to 5 per cent. and resulted in the settlement of *thani* rents at Rs. 3-3, of *thani-pahi* at Rs. 2-15, and of ordinary occupancy raiyats at Rs. 3-6.

Non-occupancy raiyats are also assessed at Rs. 3-6 per acre, there being no reason to allow more lenient terms for new cultivation in an irrigated area.

Homestead lands are plentiful in this area, and *chandina* rents therefore moderate, the incidence at the last and at the present settlement being Rs. 1-8 per acre.

There being a large population of respectable persons (*bhadralok*), the former *bazyafji* were out of all proportion to raiyati rents and have been largely enhanced—*nisfi bazyafji* by 232 per cent., *kamil* by 51 per cent., and *kahurida jamabandi* by 82 per cent. The incidence of the rents settled for *nisfi bazyafji* is Re. 1-2 per acre, or a third of the full letting value. The apparent increase in the *nisfi bazyafji* area is due in part to the exclusion from the last settlement area of waste lands, and partly to the inclusion of some *kamil* lands in the area at this settlement; about one-fourth of the *kamil bazyafji* has lapsed into

Nijchas lands form rather more than one-eleventh of the assessed area, and are valued at an average of Rs. 3-2 per acre. This represents the minimum letting value. The results of the settlement may be summed up as follows:—

Assessed area at the last settlement	...	93,000 acres.
Ditto at this settlement	...	119,000 "
Increase of assessed area	...	28 per cent.
<i>Mufassal jama</i> at the last settlement	...	Rs. 1,95,700
Ditto at this settlement	...	Rs. 3,53,700
Increase of <i>mufassal jama</i>	...	81 per cent.
Incidence at the last settlement	...	Rs. 2-2 per acre.
Ditto at this settlement	...	Rs. 2-15 "

The increase in cultivation and assets is thus rather below the average of the district, and this may be put down to the advanced state of this area at the last settlement. The incidence has increased by thirteen annas and is a good deal above the average of the district, and this must at least in part be put down to the benefits conferred by Government by the construction of roads, canals and embankments.

Block G consists of the eight Parganas of Utikan, Neulbisi, Atkhanta, Kutabsahi, Utihar, Derabisi, Damarpur and Chhedra.

Block G.

The first three of these form a low rice plain, encircled by tidal rivers from the waters of which they are partly protected by embankments, having a slightly saline soil, and to some extent irrigated from the Gobri Extension canal. The other Parganas consist of temporarily settled lands within permanently settled tracts of a generally similar character.

The whole block has been greatly improved by the construction of the canals and the connected embankments and drainages.

At the last settlement *thani* rents were fixed at Re. 1-15 per acre, and only a little above one-tenth has survived as pure *thani*, and a little over one third in the *thani-pahi* mixed.

Pahi rents have risen well above *thani*, and in consequence *thani* rents have been enhanced by 18 per cent. and *thani-pahi* by 13 per cent. Even so, the latter pay 6 annas an acre less than the settled rents of *pahi*, which average Rs. 2-12 per acre.

Non-occupancy raiyats pay Rs. 3-15 per acre, chiefly for the tobacco-growing *pāl* lands in Utikan, in which a sort of *ulbati* system prevails. About one-eleventh of the assessed area is in the immediate possession of the proprietors and has been assessed at Rs. 2-15 per acre. This is higher than the average incidence of raiyati rents, the valuation having been raised at the time of settling the revenue, on the ground that the zamindar had by illegal means dispossessed raiyats of their best lands.

In this block *bazyafidars* were somewhat highly assessed at the last settlement, so that though *kamil bazyafiti* rents are enhanced by only 38 per cent. and *nisfi bazyafiti* by 175 per cent. the incidence per acre of the settled rents is Re. 1-11 for *kamildars* and Re. 1-8 for *nisfi bazyafidars*. Generally in this block all *bazyafiti* rents are fixed at two-thirds of the village rate.

The result of the present settlement is summarised below:—

Assessed area at the last settlement	} ...	{ 36,900 acres.
Ditto at this settlement		{ 43,000 "
Increase of assessed area		{ 17 per cent.
Mufassal jama at the last settlement	} ...	{ Rs. 56,500
Ditto at the present settlement		{ Rs. 1,09,900
Increase of mufassal jama		{ 94½ per cent.
Incidence at the last settlement		Re. 1-8 per acre.
Ditto present settlement		Rs. 2-9 "

The increase in cultivation is thus below, and the increase in assets above, the average of the district. There is not much room for further extension of cultivation in this area, and the development must be ascribed to the opening of the country by the canal and the ready means of export of grain from Chandbali, and to the good management of the proprietors of Utikan, who, though themselves non-resident, have employed a very able manager.

The incidence of the assessment is slightly above the average of the district and is certainly not low for such lands.

In the block marked H are contained the principal Parganas in the Mahanadi valley, between the Kendrapara canal on the north and the Taldunda canal on the south.

Block H.

These Parganas are all liable to inundation by very high floods, but are more or less secure from damage in ordinary years.

To the west Paidna and Suhang receive the full rush of the water, and in spite of a few *bandhs* the crops are often washed away.

Kusmundal and the eastern half of Suhang are protected, and the southern part of Balubisi is both protected and irrigated.

The central portion of the block in Balubisi and Suknai is too high to suffer from inundation in ordinary years, but the waters spill over eastern Suknai and parts of Paena, Abartak and Anabartak. This block has received little benefit from protective or irrigation works and is but ill provided with roads, and yet it is one of the richest and most highly assessed in the Province.

Thani rents at the last settlement were Rs. 3-8 per acre, the highest figure of all the blocks. About one-fourth has survived as pure *thani* with a fall of annas 7 in the incidence, and as much more survives as *thani-pahi*. The rents being already high have in this settlement been only enhanced by 5 per cent. and now stand at Rs. 3-4 per acre for *thani*, Rs. 3-5 per acre for *thani-pahi*.

Pahi rents show a large increase from Rs. 2-5 to Rs. 3-8 per acre, and have in the present settlement been enhanced up to Rs. 3-5 per acre. In most villages the incidence is still less than that of *thani* rents at the last settlement. The small enhancement in this settlement, 4-5 per cent., is due partly to the rents being already too high, and partly to some reductions for damage done by sand in Suhang, Kusmandal and Suknai, which have been set-off against the increase.

One-twelfth of the assessed area is in the hands of the proprietors, and has been valued at Rs. 3-1 per acre. In almost all cases the valuation has been made at the village rate and is a trifle below the full value at which the land would let, but I do not think it is any too lenient considering how many villages are liable to the loss of crops by inundation.

As many respectable and influential persons formerly lived in these parts, *bazyasti* lands were most lightly assessed, the incidence of the rents of *nisfi bazyasti* being only As. 6 per acre, or less than one-sixth of the *pahi* rate.

It was consequently necessary to make very large enhancements in this settlement, and the rents of *nisfi bazyasti* have been raised by 202 per cent. and those of the *kamildars* by 72 per cent., the incidences of the settled rents being respectively Re. 1 and Re. 1-5 per acre. *Kharida jamabandi* rents have also been enhanced by 80 per cent. and settled at an average of Re. 1-10 per acre.

The results of the settlement may be summed up as follows :—

Assessed area at the last settlement	...	60,400 acres.
Ditto at this settlement	...	76,100 "
Increase of assessed area	...	26 per cent.
<i>Mufassal jama</i> at the last settlement	...	Rs. 1,30,700
Ditto at this settlement	...	" 2,20,400
Increase of <i>mufassal jama</i>	...	69 per cent.
Incidence at the last settlement	...	Rs. 2-8 per acre.
Ditto at this settlement	...	" 2-14 "

The extension of cultivation and increase of assets is below the average of the district, and this may be put down chiefly to the very advanced state of this tract at the last settlement and to the absence of any improvement in its physical condition.

It does not appear, however, to require protection or irrigation, as the richest and most highly assessed villages are in the unprotected parts of Balubisi. Mr. Carey, who was in charge of the assessment of this block, recommended the canalisation of some of the *ghors* and spill channels and the provision of sluices as the best method of securing the country from floods and drought.

Block I consists of Parganas Cuttack Haveli, Bakhrabad, Bahurupa, Kodinda and Motri in the immediate neighbourhood of Cuttack town.

Block I.

They present a very great diversity of physical characteristics. Cuttack Haveli and Bakhrabad contain highly assessed urban and suburban areas, besides large expanses of almost valueless land. Bahurupa and Motri are hilly and more akin to the Khurda Government estate than to the plains of Cuttack.

Half of Kodinda is protected and irrigated, and half is subject to serious damage by inundation. Except in the protected area of Kodinda the agricultural condition is almost the same as at the last settlement; a great deal of the land is inferior, but there is much garden cultivation for the supply of the market of Cuttack.

Thani rents at the last settlement averaged Rs. 2-7 per acre, and the assessment was a high one for the quality of the land: rather more than half of the holdings have survived, with a fall of incidence in the case of *thani-pahi*. *Thani* rents are still almost always higher than *pahi*, and the small enhancements made are counterbalanced by reductions of rent on account of damage by sand in the villages of Kodinda and Eastern Bakhrabad due to the bursting of the Mahanadi and Katjuri embankments.

Pahi rents rose from an average of Rs. 1-13 to Rs. 2-7 per acre, and have been further enhanced by 4 per cent. chiefly for excess area. The enhancements would have been considerably greater, but, as in the case of *thani*, reductions had to be allowed for damage caused by deposits of sand.

The *chandina* area has increased from 564 to 683 acres, and the incidence per acre from Rs. 3-13 to Rs. 5-11 per acre; the high rate is of course due to rents in the town and its neighbourhood.

About a twelfth of the assessed area is in the hands of the proprietors and has been valued at Rs. 2-10 per acre: that this is higher than the average incidence of *rai*yati rents is due only to the fact that the lands lie chiefly in the more highly assessed villages.

The culturable area assessed consists of unoccupied houses and sites in the town.

The assessment of *bazyafli* was high, because in these tenures were included many valuable homesteads and house sites, and as there has been a large extension of cultivation and a great increase in the value of house property, the rents have been largely enhanced, *nisfi bazyafli* being raised 205 and *kamil* 107 per cent.

The results of the settlement may be summed up as follows:—

Assessed area at the last settlement	}	24,800 acres.
Ditto this settlement		34,300 "
Increase of assessed area	}	38 per cent.
<i>Mufassal jama</i> at the last settlement		Rs. 46,700
Ditto at this settlement	}	82,400
Increase of <i>mufassal jama</i>		77 per cent.
Incidence at the last settlement	}	Rs. 1-14 per acre.
Ditto at this settlement		Rs. 2-6 "

The increase of cultivation is slightly above the average, and there is still a good deal of inferior land that may come under the plough.

The increase in the *mufassal jama* and in its incidence is below the average, and this appears to be due partly to the damage caused by the sand and partly by the success with which some of the tenants had resisted the zamindars enhancements.

I found many *pahi* *rai*yats holding last settlement *pattas* and others why with only palm leaf leases had managed to hold at an unaltered *jama* for 30 years.

Reductions have been freely allowed for deterioration of soil, and the present assessment of this block appears, considering its position, very moderate.

Block J contains the Purganas between the Katjuri and Mahanadi rivers, and for the most parts protected and irrigated by the Taldunda-Machgaon canal system, viz., Hariharpur, Sahabad, Kurunia, Gandito, Jhapkar, Khandi, Benahar, Tiran, Apila, Jainabad, Sujabad.

These were even at the last settlement partly protected from floods, but except Hariharpur and Jhankar were very difficult of access and in a most backward state. Since then they have been connected with Cuttack by two excellent roads, reaching to Taldanda and Machgaon, and are well supplied with village roads, distributaries, and other means of communication. In the eastern part of Hariharpur and Jhankar irrigation from canals is well established, but in Gandito and Kurunia it has been only recently adopted, and in Benahar. Khandi, Tiran, Apila is too new to have much affected rents.

Thani at the last settlement paid Rs. 3-2 an acre, and two-thirds of it survived as *thani* or *thani-pahi* paying a slightly lower rate of rents. The *thani* rents were enhanced by 8 per cent. and their incidence is now Rs. 2-15 per acre; *thani-pahi* have been enhanced by only 3 per cent. up to Rs. 3-1 per acre.

The incidence of *pahi* rents rose from Re. 1-15 to Rs. 3 per acre, and by the present enhancements has been raised to Rs. 3-2 per acre. The zamindars had generally enhanced rents sufficiently, so that there was little call for further enhancement at the time of settlement.

Rather less than a twelfth of the whole assessed area is held by the proprietors as their private land and has been assessed at Rs. 2-14 per acre, or four annas less than the average incidence of rents of settled and occupancy holdings. Considering that many of the principal zamindars in these parts are absentees, this assessment appears quite high enough.

The *kharida jamabandi* and *kamil* lands were at the last settlement assessed at Re. 1-4 and Re. 1 per acre, and their rates being high, the enhancements come to only 44 and 51 per cent. *Nisfi baryasti*, on the other hand, having been assessed at only annas 5 per acre, the rents have been enhanced by 208 per cent. and are settled at an average of one rupee per acre. This is only a third of their letting value, and there will be no difficulty in paying the new rents.

The result of the settlement may be summed up as follows :—

Assessed area at the last settlement	} ...	101,300 acres.
Ditto at this settlement		120,100 "
Increase of assessed area		19 per cent.
<i>Mufussal jama</i> at the last settlement	} ...	Rs. 1,88,200
Ditto at the present settlement		" 3,16,800
Increase of <i>mufussal jama</i>		68 per cent.
Incidence at the last settlement	} ...	Re. 1-14 per acre.
Ditto the present settlement		Rs. 2-10 "

The extension of cultivation has been small, because there was not much culturable land left. The increase in assets is therefore below the average, though the incidence has risen by twelve annas an acre.

Careful enquiries have failed to prove that any enhancements have been made on account of irrigation, but there can be little doubt that a good deal of the great increase in raiyats' rents is due to the general improvement of the tract by canals, embankments and roads, though zamindars do not seem to have discriminated between irrigated and unirrigated lands.

The last block comprises the six Parganas of Bardiala, Kate, Deogan, Saibir, Sailo, and Sujanagar, forming the southern border of the District.

Block K.

In all these Parganas a part has been protected from flood, but on the other hand the small embankments that formerly guarded individual villages have, with a few exceptions, been abandoned and a greater amount of water now spills over the country. To the protected area in Saibir, Deogan, and Kate irrigation has been extended, but too recently to have had any effect on rents. Except Sailo, all these Parganas depend to a great extent on the *rabi* crop, and the tobacco of Deogan and Saibir is the finest in the Province.

Thani rents at the last settlement stood at Rs. 3 per acre, and from *thani* or *thani-pahi* about half survived with a fall of 7 or 8 annas per acre in the incidence.

Even so, the rents were above the *pahi*, and the enhancements made are only 4 per cent. The incidence of the settled rents, Rs. 2-10 per acre, is a good deal higher than that for the flooded tracts in Puri, owing to the larger area capable of growing tobacco, *pan* and other valuable crops.

Pahi rents rose during the settlement from Re. 1-15 to Rs. 2-4 per acre. Great difficulty was found in getting correct statements of rents from the zamindars, and in Sailo and Kate the officers on fair rent work were convinced that the landlords and tenants, acting in collusion, were understating rents. In some cases the production of original papers enabled the rents to be corrected, in others the zamindars filed revised rent rolls showing approximately correct rents. In two villages the original assessment made on the basis of papers filed by local agents had to be subsequently corrected on the application of the landlords.

On the whole I think these measures resulted in a very fair record of rents, but it was impossible to be quite accurate, as the system of annual measurement and summary assessment of the crop was very prevalent.

In Sailo and Saibir the difficulty was that the zamindars, the Chaudharis of Bhingarpur, had no papers that could be trusted, and were at once fighting with one another and being defrauded by their local agents. As a rule, the Assistant Settlement Officers managed to get a fair record of the rents, but in some cases they were compelled to come to a compromise as to rates and calculate rents on a rough crop map.

The comparatively large enhancements of occupancy raiyats' rents by 9 per cent. are due partly to a good deal of enhancement of low rents by compromise, and partly to the great extension of cultivation in West Sailo. The settled rents of occupancy holdings average Rs. 2-7 per acre, and, except in Bardiala and Kate, are generally lower than *thani* rents at last settlement. I do not, however, consider them too low, and the fall in the incidence of *thani* rents renders it probable that the *thani* lands were over-assessed.

The non-occupancy raiyats include a number of residents of other villages who have taken up tobacco lands to cultivate, as well as raiyats who have recently reclaimed lands along the Puri border, and the apparently high enhancement—89 per cent.—is due to the fact that many of these tenants have now for the first time been assessed.

Kharida jamabandi and *kamil* rents were found to be already high and have been enhanced by only 58 and 51 per cent., but *nisfi bazyasti* rents were only annas five per acre, and there had been a considerable increase in the amount of cultivated land contained in these holdings.

They have accordingly been enhanced by 223 per cent., and settled at an average of nearly Re. 1 per acre.

The lands in the possession of the proprietors form nearly a sixth of the assessed area, and have been assessed at Rs. 2-5 per acre. The very large extent of *nijchas* is due to most of the zamindars of Deogan being cultivating Brahmans and to the large number of proprietary tenures, this being the chief *maurasi* area in Cuttack.

The result of the settlement may be summed up as follows:—

Assessed area at the last settlement	} ...	{ 57,300 acres.
Ditto at the present settlement		{ 90,900 "
Increase of assessed area		{ 59 per cent.
<i>Mufassal jama</i> at the last settlement	} .	{ Rs. 1,09,500.
Ditto at the present settlement		{ Rs. 2,05,300.
Increase of <i>mufassal jama</i>		{ 88 per cent.
Incidence at the last settlement	} ...	{ Re. 1-15 per acre.
Ditto this settlement		{ Rs. 2-4 "

Thus the extension of cultivation has been much above the average owing to the greater area left for reclamation, but the rates of rent have risen less than in most parts, owing no doubt to the fact that this area is almost as exposed to flood and as difficult of access as ever.

The increase of *mufassal jama* is slightly above the average on the whole block, and much above it in Sujanagar, Kate and Bardiala.

Enquiries seem to show that the construction of embankments has benefited the protected parts of Saibir and Kate at the expense of the unprotected, but has been of very doubtful advantage in Sailo.

544. Mr. Kingsford, in Part IV of his report, divides the District into the following local areas:—

Rents in Balasore.

Northern Parganas	Block A.
Upper central	" B.
Lower central	" C.
South-eastern	" D.
South-western	" E.

It is well known that the general incidence of rents is far below that of Cuttack, and slightly below that of Puri. An explanation of this has already been given in paragraph 540.

It is only necessary to say here that the reason is the backward state of the district at the last settlement, that few lands can grow more than one crop of *sarad* rice, and that the incidence generally has now risen by 42 per cent. as against 33 per cent. in Cuttack and 18 per cent in Puri.

The rise in assets is 72 per cent. since the last settlement, and by the present proceedings about 16 per cent.

Northern Parganas include Bhograi, Kamardachaur, Kismat Nanpachaur, Katsahi, Kismat Katsahi, Satmalang, Nangleswar, Dararachaur, Kamardachaur, Sahabander, Seari and Mahdachaur.

Block A.

In 1832 the storm-wave destroyed an enormous number of lives, and threw very large areas out of cultivation.

The effect of the embankment system and the Coast Canal has been to retain flood for a longer period in the northern portion of the area and to increase the damage to crops.

The Subarnarekha river, too, is known to be most treacherous. It frequently changes its channel, and appears to do the most wanton mischief. On the other hand, we must bear in mind the fact that cultivation has extended to lands liable to flood, and for that reason the damage becomes more noticeable.

As compared with the rest of the district the increase in assets is 74 per cent., and assets have been raised by 21 per cent. in the present proceedings. This is mainly due to the rapidity with which cultivation is still extending, the rents of non-occupancy raiyats having been raised from Rs. 4,800 to Rs. 11,100, or by 131 per cent. A great deal of this increase was for entirely new cultivation since the record-of-rights was prepared, but a portion appears to have been collected by zamindars' agents without finding its way into the zamindars' pocket. The new incidence is only Re. 1-10-2. The high incidence of *kamil ba-yafai* and the consequent lapse of area under that tenure is remarkable. The new incidence is Re. 1-2 per acre as against Re. 1-1-2 at the last settlement, and as against Re. 0-14-10, the new incidence of *kamil* in the whole district.

The new incidence of *pahi* amounts to Re. 1-15-3 as against Re. 1-5-10 at the last settlement, and is above the district average of Re. 1-13-6. This is due to the fact that *pahi* was Re. 0-2-11 per acre higher than the district average at the last settlement. There is a noticeable tendency to high rents near permanently settled areas such as this northern group, but it is also remarkable that lands liable to flood (and silt deposit) do pay higher rents than ordinary rain-fed lands.

The new incidence of *thani* is Re. 1-13-1 as against Re. 1-13-0, but only 1,100 acres survive as pure *thani*, and about 3,800 as *thani pahi* mixed, out of 12,700. The best lands are held by large *pahi* cultivators, and are now recorded as *pahi*. *Nichas* forms a little more than 5 per cent. of the area, and is valued at Re. 1-12-7; it includes some lands exposed to flood.

The upper central Parganas include Dasmalang, Sartha, Phulwar, Garpada, Baza, Talsabang, Sunhat, Rautra, with Amala, Khajuri, Nunkland, Chamma, Kundi

Block B.

Mukhra, Mulgan Remman and Delimuban. This block really consists of two portions, the eastern and the western.

In the eastern portion (Dasmalang, Rautera, Sartha) great damage was done in 1832 by the storm-wave, and the lands are now somewhat liable to flood; in the western portion, the drainage falling naturally towards the east, we find drought in the years when the rain is at all scanty.

Assets generally have increased by nearly 70 per cent. since the last settlement. *Pahi* rents have increased very satisfactorily, the incidence having risen from Re. 0-15-10 to Re. 1-7-7 and now settled at Re. 1-10-3. The incidence of *thani* rents is almost stationary; the higher rented *thani* had lapsed in the course of the settlement, and the present incidence has been raised from Re. 1-6-2 to Re. 1-8-7 per acre. Pure *thani* rents have been raised by 11 per cent.; the increase in *pahi* rentals is also 11 per cent., the latter of course include a large area of lapsed *thani*. About 7 per cent. of the area is held by zamindars and is valued at Re. 1-9-7, as against the raiyati incidence of Re. 1-10-3. It will be seen that the general incidence of rents is below the district average, and this may be expected on account of the high situation of the bulk of the lands in the western portion of the group.

The rents of *bazyaftidare* are low as compared with the district average, the incidence being Re. 0-12-1 and Re. 0-14-2 for *nichi* and *kamil* as against Re. 0-13-11 and Re. 0-14-10; the enhancements are 161 per cent. and 54 per cent. respectively.

On the whole the present proceedings have yielded 20 per cent, i.e., rather above the district average on account of large quantities of excess area.

The lower central Parganas comprise the group known as Banchas Oger and contain the largest number of proprietary tenures and the three large estates of Mobarakpur, Káidá and Arang.

The general enhancement in the block is only 14 per cent. as compared with the district figure of 16 per cent. The rise in assets since the last settlement amounts to only 65 per cent., but settled assets are 89 per cent. in excess of the assets at the last settlement. It was to be expected that the increase would not be so great here as in other parts of the district; the area suffers no disability as regards flood, but is naturally rather poor and somewhat high, and suffers to some extent from drought.

Practically also only a single rice crop is grown. There has been an increase of cultivation, amounting to only 29 per cent., as against the district average of 40 per cent. On the other hand, the incidence of *pahi* has risen from Re. 0-13-11 to Re. 1-8-4, and the rents are now quite as high, as in the present state of prices the lands can afford to pay, the enhancement in the present proceedings being 8 per cent.

Thani has been considerably enhanced in the present proceedings; it was found that the present incidence of *thani* was only Re. 1-4-11. The last settlement incidence of *thani* was Re. 1-5-5, but we know that this was considered high, because the *thani* raiyats of Káida were only able to pay their *thani* rents by working as coolies in salt manufacture (see *ruidad* of that estate). The present enhancement of pure *thani* is 12 per cent. and the new incidence is Re. 1-7-5, or nearly one anna in the rupee below *pahi*. Considering that the best lands are in the *thani-pahi* area, I think this is sufficient. *Nisfi* and *kamil* have been enhanced by 162 and 50 per cent. respectively, but the new incidence is only Re. 0-11-10 and Re. 0-14-3, i.e., below the district average in the case of *nisfi*, and nearly equal to it in the case of *kamil*.

The south-eastern Parganas comprise Ankura, Bhera, Bayang, Kaima and Kismat Kaima, Senaut, Kodinda, Jalang and Dhamnagar. The block might well be divided into three:

(i) Ankura and Bhera as affected by the floods of the Mutai and the defective drainage caused by the Coast canal, (ii) Bayang, Kaima and Kismat Kaima as affected by the Baitarni embankment, and (iii) Senaut, a very fertile and highly populated and cultivated tract.

(i) Ankura and Bhera are liable to flood, but cultivation has increased very largely. It is, however, to be remembered that while the new revenue is now raised by nearly 100 per cent., it is not much more than 50 per cent. in excess of the revenue in 1831; i.e., before the storm-wave. To bring the Parganas into a more prosperous state it is necessary to investigate the use of the Coast canal and the obstruction of drainage caused by its banks.

(ii) Bayang, Kaima and Kismat Kaima.—A glance at the map will show the confluence of the Baitarni with the Brahmani in the so-called Dhamra river. In 1894 the severest flood known (so far as I know) occurred in the Brahmani. I spent 10 days sailing over these rivers making minute enquiries (as Collector of Balasore) into the damage done by the flood. It was apparent to my unprofessional eyes that the muddy water of the Brahmani thrust back the red waters of the Baitarni into the Salandi and into the Mutai, and having no outlets southward on account of the Baitarni embankment, the southern portion of the Balasore District was devastated. I merely state this for what it is worth as a personal experience, but I would call attention to the general report on Bayang Pargana, to Mr. Kingsford's remarks, and my own. I quote the following from Mr. Kingsford's report:—

"It may be interesting to attempt to estimate the loss caused in this District by the erection of the Baitarni right embankment. Taking Bayang alone, since the effect here is obvious and indisputable, the settled gross assets of this Pargana are Rs. 78,540, and had the liability to flood existed to no greater extent than at last settlement, a grant of *malikana* at 50 per cent. would have made full allowance for the circumstances. The *sadar jama* would thus have been Rs. 39,270, and the reduction in proprietors' incomes 14 per cent. *Rasadi* terms would not have been necessary except in isolated cases. As the facts stand, however, the revenue settled for 1899 amounts only to Rs. 30,807 and rises by 1908 to Rs. 36,802. I

Fiscal circumstances of the south-western group.*

* See Appendices B A to B F.

find by calculation that the difference between revenue at 50 per cent. and the actual *rasadi jamas* fixed for the 9 years between 1899 and 1907 amounts to Rs. 68,531. Of this sum Rs. 60,000 may fairly be taken as *rasadi* necessitated by the bad collections and reduced* rents which are a direct result of the increased liability to flood. For the remaining 20 years of settlement this loss is Rs. 48,950, and the total loss to Government for the period of settlement is therefore Rs. 1,08,950, but this excludes all consideration of the remissions which severe floods will entail. During the 30 years following the last settlement the remissions averaged 10 per cent of the demand throughout the District, and it will be surprising if those which will in future be necessary in Bayang amount to less. The remissions are not therefore likely to be less than a lakh of rupees during the period of settlement, and the total loss to Government will be Rs. 2,08,950.

"It is not so easy to estimate the loss of the zamindars. However, 28,000 acres of cropped lands out of 40,000 acres, which is the total assessed area, are liable to flood, and the amount of the gross assets affected may be taken therefore as $\frac{1}{4}$ of the total, or Rs. 55,000. Instead of realising 80 per cent. of this sum the zamindars will realise 70 per cent. only and their loss will therefore be Rs. 5,500 per annum or over a lakh and a half of rupees during the period of settlement.

"As regards the raiyats no such estimate is possible, but some idea may be gathered of their circumstances from the fact that on the average each raiyat in the flooded tracts is two years in arrears with his rent. The time appears therefore to have come for consideration whether the benefit derived on the Cuttack side of the river counterbalances the serious loss in the District, and failing the abandonment of the Baitarni right embankment it is most desirable that a scheme for embanking the left side should be brought forward. In 1865 the Inundation Committee† stated that the expenditure of a sum of 23 lakhs of rupees was warranted in this District to avoid the necessity for remissions and to secure full crops. Since that date I am not aware of any sum worth mention that has been spent on new protective works with the exception of those necessitated by the construction of canals."

Mr. Kingsford has somewhat over-estimated the damage, because terms have been given for revenue purposes sufficient to cover great loss, i.e., proposals have been made on assets only 70 per cent. of which are believed one year with another to be realisable. I do not expect therefore that any remissions of the revenue now settled will be necessary. It has further been recorded in the *kaluliyat* that if the embankment policy is altered revenue on a higher scale will be levied. Perhaps the loss to Government in revenue may be estimated at one lakh, and to proprietors at half a lakh of rupees for the term of settlement. I have held local enquiries on both sides of the river, and on the south side the Cuttack raiyats complained bitterly of the embankment as depriving them of the benefits of the Benga-Kiya and other water channels. A portion of Dhamnagar in the south-western block (E) is also affected by this embankment.

(iii) Senaut.—This Pargana is by far the richest and most populous in the District and is the most highly rented. A portion is occupied by the Government estate of Nuanand, parts of which are held *ipmali* with other estates. Government has from time to time made re-settlements and the general incidence is very high (Rs. 2-5). For some strange reasons the rents of *thani* raiyats have been raised during the currency of this settlement in the Government estate.

The general *pahi* raiyati incidence throughout the block is now Rs. 2-2 as against Re. 1-5-10 at the last settlement, the District incidence being Re. 1-13-6 and Re. 1-2-11 respectively.

We find that the increase of assessed area is 38 per cent. as against the district average of 40 per cent., but the enhancement of assets since the last settlement naturally falls short (90 per cent.), chiefly because the Senaut Pargana was then in a forward state, and generally inferior lands in that Pargana have since come under cultivation. The rise in incidence all round is from Re. 1-6-10 to Re. 1-15-7, or 38 per cent. Settled raiyats' rents have been enhanced by 9 per cent., and they now pay Rs. 2-2 per acre. The incidence of the block is very high, but in the flooded tracts where a full crop is scarcely expected twice in five years the incidence will not exceed Re. 1-9 per acre, whereas in Sunhat it rises to Rs. 2-5. The rent of *nisfi bazyafsti* has been raised by 190 per cent., and of *kamil* by 55 per cent., but the incidences in both cases are slightly higher than the district incidence of *bazyafsti* tenures, but are low as compared with the raiyati *pahi* incidence of Rs. 2-2 and of *thani* Rs. 2-4-11.

* Many proprietors have been compelled to reduce the demand since 1894. It was estimated that they would be fortunate in realising on the average 70 per cent. of the settled rents in the flooded tracts.

† See their report, page 25.

Out of 27,500 acres of *thani* at the last settlement 4,200 have survived as pure *thani*, and 16,400 as *thani pahi*, and the new incidence is almost the same as at the last settlement, i.e., Rs. 2-4-11 as against existing incidence of Rs. 2-2-3 and the last settlement incidence of Rs. 2-3-9. The remarkable survival of *thani* is of course due to the accuracy of the *khas mahal* records, and the fact that the incidence did not fall a great deal more during the currency of the settlement is due to the same cause, and also because in Nuanand some enhancement of *thani* was made during the currency of the Settlement. In the present proceedings *thani* rents have been enhanced by 8 per cent., and are now fully as high as tenants can afford to pay.

Proprietors have got off rather easily, but in many cases they are cultivating proprietors and have to face large increases of revenue. The valuation for nearly 9 per cent of the assessed area is only Re. 1-14-6.

This group includes Parganas Randhia Orgara, Soso, Munjuri, Balikhand, Adharupia, portions of Ahyas, Jajpur, Matkatabad, Sahebnagar and Matkatnagar.

Block E.

We have the largest increase of assets in this block, i.e., from Rs. 1,15,700 to Rs. 2,46,800, the increase by the present proceedings being 18 per cent, i.e., from Rs. 2,08,600 to Rs. 2,46,800, or by Rs. 38,200. Out of this sum *bazyastidars*, *nisfi* and *kamil*, are responsible for Rs. 15,700, and they have been enhanced 243 per cent., and 84 per cent., respectively. This may appear severe at first sight, but the *kamil* incidence is one anna four pies below the district average, i.e., Re. 0-13-6 as against Re. 0-14-10, and the *nisfi bazyasti* incidence is only half an anna higher than the district average. The fact is that the tract suffers from no natural disadvantage, and cultivation has extended within the uncultivated area recorded at the last settlement in the *bazyasti* holdings.

In Randhia Orgara and Soso irrigation has been extended by the High Level canal. The inclusion of Ambahata in this block has very considerably reduced the general incidence. Ambahata is high and rather rocky. In Balikhand and Adharupia the lands are also somewhat high and subject to drought. Considerable paper enhancements were made in Balikhand, i.e., it was impossible to discover the real rents on account of the collusively low records, but the rents stated by the zamindars were considerably enhanced. It is noticeable that in the south of the District close to Cuttack rents are higher than elsewhere, except in Senaut. This is due partly to natural advantages, but also to the greater pressure of population on the soil and to the fact that the high rents in Cuttack have affected the rents in the border. It is noticeable that only in this block *thani* rents are higher than *pahi*, but whereas at the last settlement the incidence was Re. 1-10-9 and Re. 1-0-11, respectively, it is now Re. 1-14-8 and Re. 1-11. The *pahi* lands are undoubtedly not so good as the *thani*.

545. As we have already seen, the increase of rents and revenue in the

Rents in Puri

Puri District is extremely disappointing. In the first place, assets have increased by only 30 per cent. during the settlement and have now been raised by 12 per cent., while the general incidence of rents has only risen from Re. 1-7-4 to Re. 1-11-7. The principal reason is that nearly one-third of the assessed area was held by privileged tenants whose rents were fixed for the term of the settlement, or in perpetuity. Again, from these privileged tenures the increase in the present proceedings is less than elsewhere, because the *bazyastidars'* rents were very high at the last settlement. The general incidence of *nisfi* and *kamil* was Re. 0-9-10 and Re. 1-2-6 at the last settlement as compared with the Orissa figures of 7 annas and 14 annas respectively, and the incidence of the settled rents of these tenures is now Re. 1-3-2 and Re. 1-4-1 respectively, as against the Orissa figures of Re. 1 and Re. 1-5. Other minor reasons for the small increase are (i) the hopeless mismanagement in Lombai Pargana by the Raja of Puri; (ii) the fact that 28,000 acres are held by *bahal tankidars* whose rents are fixed in perpetuity; (iii) the liability to flood, drought and saline efflorescence of Serai, Chaubiskud and Rahang. Perhaps, however, the main reason is that the increase of the assessed area is only 23 per cent., whereas in Cuttack it is 32 per cent., and in Balasore 40 per cent., i.e., Puri was very forward at the last settlement, and there was very little room for extension of cultivation, and cultivation could only extend over inferior soil. Another reason which must not be lost

sight of is the fact that out of some 1,700 villages assets in nearly 963 villages are collected by proprietary tenureholders, and that the assets of these villages represent more than $\frac{1}{3}$ ths of the mufassal jama of the District (temporarily settled area). We have found it more difficult to detect fraud and collusion in the areas of these tenureholders than in the ordinary zamindari or *hastabud* areas, and the tenureholders have continued to absorb an enormous amount of *nijhas* without apparent increase of rent rates. Lastly, I feel bound to add that, before Mr. Maude came, the work in Puri was not done methodically, and the record of rents was not sufficiently scrutinised. The difficulty of detecting collusion is very much increased when once a record of rents has been attested, i.e., it is so much easier to check fraud at the stage of the first attestation or even at *khanapuri* than at a later stage. I must add, however, that in Kotdes and Kotrahang the rents of *thani* raiyats were much too high at the last settlement; both Mr. Nathan and Mr. H. McPherson came to the conclusion that in many cases rents of *thani* raiyats absorbed from one-half to one-third of the value of the produce, and it appears that a few years later nearly the whole produce must have been absorbed.

On the whole it is my opinion that a greater increase of assets should have been derived from Puri, but for the reasons given above no great increase could have been expected. (See also the remarks on Block V in this paragraph.) At the same time it is to be remembered that the Settlement Department had to buy its experience, and the cost was mostly borne by the Puri District.

The Puri District for the purpose of comparison of areas has been divided into 13 blocks:—

Block I.—Kotdes and Antrodh.	Block VI.—Kotrahang.
II.—Kodhar, Astrang Kurilo, and Tappa Kanman.	VII.—Paschimduai.
III.—East Athaisi and Damar-khand.	VIII.—Purubduai-Oldhar.
IV.—West Athaisi and Matkatpatna.	IX.—Rahang.
V.—Lembai.	X.—Sera.
	XI.—Chambiskud.
	XII.—Banchas.
	XIII.—Scattered estates

Pargana Kotdes is a large fertile tract lying between the channels of the Kushbhadra and Bhargabi. It is partially protected by embankments along the upper reaches of the rivers. It is marked in the north-west by considerable diversity of level. In the south-east it consists of an extensive plain, subject to inundation in years of heavy flood. The north-east grows the lighter varieties of *sarad* rice. The south-west grows chiefly *bara dhan*. There is a long belt of high land along the north-west boundary of the Pargana, separating it from the Cuttack delta and continuing into Pargana Antrodh. Antrodh consists of this high inferior land on the north-east and a fertile central tract lying between the Kushbhadra and the high land, drained by and subject to occasional flood from the Kadua river. At last settlement *thani* rents averaged Rs. 2-7-8; *pahi* rents, Rs. 1-10-6. At the present settlement the *thani* area was found to have declined 26 per cent. and *thani* and *pahi* rents stood at a practically uniform level (*thani* Rs. 2-0-1 and *pahi* Rs. 2-0-5). The average of settled rents of occupancy holdings is Rs. 2-2-2. The block is more or less continuous with the Kotdes Mahal, of which more than three-fourths is held by proprietary tenureholders. The zamindari portion has been grossly mismanaged for the last 20 years. The *maurasi* portion includes a very large *nijjal* and *nijhas* area cultivated by the numerous descendants of the last settlement *maurasilars*. Both these causes—zamindari mismanagement and *maurasi* self aggrandizement—have doubtless done much to obstruct the upward tendency of *pahi* rents.

Some *nijfi bazgafti* appears in this block to have been classed as *kamil*, and the rents being already high the enhancement of *bazgafti* rents is only 100 per cent.

Nijhas lands, owing to the number of *maurasi* tenures, form more than a fifth of the total area and have been valued at less than Rs. 2-2 per acre. The increase of assessed area in the block is 25 per cent. and that of *mufassal jama* from Rs. 1,33,000 to Rs. 1,94,000, or 46 per cent.

Out of the new revenue of Rs. 1,14,000 I regret to say that Rs. 1,04,000 is due by one recusant estate. The reasons for the recusancy of Kotdes have been given elsewhere. It belonged to spendthrift Uriya gentlemen, and passed into the hands of three sets of creditors who were unable to agree upon a *modus operandi* for its management. There is therefore no prospect of effecting settlement. The high-rented *thani* lands lapsed soon after the settlement and again in 1866, and considering the large area held by proprietary tenureholders I think that generally rents are quite as high as the lands can afford to pay.

This includes four small Parganas—Kodhar, Kurilo, Astrang and Tappa Kanman, lying in the extreme north-east of the district adjoining Killa Marichpur. They are all subject to inundation from the Debi river, which divides the Cuttack from the Puri district north of Kodhar. The lands are not very superior. There is a considerable admixture of sandy scrub jungle, and towards the sea there is exposure to salt inundation. Rents were below average at last settlement, *thani* incidence being Re. 1-12, *pahi* incidence Re. 1-3, and general raiyat incidence Re. 1-8. There has been a decline in *thani* area and incidence, and a rise in *pahi* area and incidence. Rents are now more or less uniform, the settled average incidence being Re. 1-10 as opposed to a district average of Re. 1-15. On the whole the development has been as follows:—

		Last Settlement.	Present Settlement.	Difference per cent.
Assessed area	...	11,600 acres.	15,900 acres.	37
Mufassal jama	...	Rs. 15,200	Rs. 23,600	55
Incidence of mufassal jama per acre	...	Re. 1-5	Re. 1-8	...

The enhancement made in the present settlement aggregates only Rs. 2,000 or 9 per cent. There is only a small area held by privileged tenureholders, and not much scope for enhancement of raiyati rents.

This block is some 12 miles long by six miles wide. It is oblong in shape with one of its shorter sides resting on the sea, having the right bank of the Prachi river on the east side and Parganas Antrodh and Banchas on the west. The Kadua river divides the block in half. In the villages of Athaisi on the coast the soil is sandy and poor, and in many parts of the block it is brackish. Mr. McPherson in his block reports makes suggestions for opening out roads, and some relief might be obtained by closing the breach in the Panpara embankment and throwing small embankments along the sides of the Kadua river. We find that poorer raiyats and labourers make up one-fourth of the population in this block, and that in times of high prices as in 1896 they suffer very acutely. In Damarkhand generally there is more prosperity than in Athaisi.

We find that the higher rented *thani* lands have lapsed, the general incidence having fallen from Re. 1-10 to Re. 1-6 and now raised to Re. 1-7; settled raiyats, however, show improvement. At the last settlement the general incidence was only 15 annas, and it rose to Re. 1-7 in the course of the settlement and is now raised to Re. 1-8. There has also been a large increase of cultivation, i.e., 33 per cent., and an increase of assets amounting to 61 per cent. Thus notwithstanding the fact that 65 per cent. was taken as revenue at the last settlement and now only 56 per cent. is taken, the increase of revenue is nearly 38 per cent.

The latter Pargana consists of scattered villages in West Athaisi, the whole block being 28 square miles in area. It adjoins block III in the east and rests on the Bay of Bengal, adjoining Rahang, Purubduai and Oldhar on the west, being separated by the river Kusbhadra.

Block IV—West Athais and Matkatpatua.

The block may be divided into three tracts, the sandy belt by the sea reaching nearly $2\frac{1}{2}$ miles inland, which may only be partially reclaimed by casuarina plantation, the tract near the Kusbhadra which is liable to severe annual inundations, and the area east of this containing high lands and jungle.

It is to be noticed that the lands lying along the Kusbhadra are the richest, but that the constant floods keep rents down. There is not a single road in the block; all the village paths lead to Nagpur Hât, close to the Puri-Gope road.

It is a matter for consideration whether the mouth of the Kusbhadra now choked with sand and the tides could not be cleared out so as to discharge its flood water and set free submerged cultivation in time to save the crop.

As compared with blocks II and III *pahi* rents were high at the last settlement, the incidence being Re. 1-3-9 per acre. It has now risen to Re. 1-10, and has been raised to Re. 1-10-11. The *thani* incidence has fallen from Re. 1-15 to 1-10-5, and has now been raised to Re. 1-11.

Until some change is made in the Kusbhadra (see remarks on Purubduai-Oldhar, block VIII), I do not think rents are too low. The increase of cultivation has been 19 per cent. and the increase in assets 3 per cent., but the increase of revenue is only 28 per cent.

Lembai Pargana is a large fertile tract skirted on the north by the Daya channel, from which it is protected by embankments liable to breach in years of heavy flood.

Block V—Lembai.

On the west the pargana runs up towards the Khurda high lands. It grows chiefly *sara* rice. The lands are very fertile. The last Settlement assessment was moderate, viz. Re. 1-14 for *thani* and Re. 1-9 for *pahi*, average Re. 1-13. The major portion of the raiyati area was *thani*. There has been a decline in the *thani* area and incidence, while *pahi* rents have remained stationary.

There is no doubt that this Pargana has been under-assessed. It almost entirely consists of the Delang estate, belonging to the Raja of Puri. At one time or other the Raja bought up most of the *puadhani* tenures, but he allowed the assets to be collected by a succession of low-paid *gumustas*, who left service without rendering accounts as soon as they had feathered their own nests. Though there are some good lands in the Pargana, portions are subject to flood from breaches in the Daya embankment. We find that the Pargana was in a very forward state at the last settlement, *pahi* incidence being as high as Re. 1-9 per acre, and *thani* being Re. 1-14. During the course of settlement *thani* incidence had fallen to Re. 1-12 and was raised in the present proceedings to Re. 1-14, while *pahi* remained stationary at Re. 1-9 throughout the 60 years and is now raised to Re. 1-12.

In justice to the Assistant Settlement Officer who assessed this Pargana, it must be said that every attempt to ascertain rents was made, but no papers were forthcoming. Furthermore, complete re-attestation was made, with the result that the zamindar generally adopted the survey areas, and little or no increase of rents was obtained on the score of excess area. Nevertheless, the Assistant Settlement Officer, Babu Akshay Kumar Sen, did manage to get an increase of three annas on the *pahi* incidence. The proprietary tenureholders' lands were valued at the full amount possible, i.e., Rs. 2-2 per acre, but the lands were generally the best in the Pargana.

On the whole the results are as follows: 35,100 acres assessed at the last settlement paying Rs. 51,700 had increased to 44,300 acres in the course of settlement, paying Rs. 59,500 and the new assets were raised to Rs. 70,400 or by 18 per cent. which compares very favourably with the average district enhancement of 12 per cent.

Considering the mismanagement of the zamindar, revenue was proposed all round at 63 per cent. and gave an increase of Rs. 10,047 or 29 per cent. At the same time the amount retained by the proprietary classes was raised by 3 per cent. In Delang Taluk, owing to the increased sums which he received from the proprietary tenureholders, the Raja's income was raised by 23 per cent. and on the whole block the zamindars gain a clear 21 per cent. by the re-settlement. There is no doubt that the all-round incidence of this block should have worked out to not less than Rs. 2 per acre or Rs. 90,000, instead of Rs. 70,400 at Re. 1-9 per acre, and the new revenue should not have been less than Rs. 50,000 instead of Rs. 44,500. Considering the fact that there was no proof of the date when rents were fixed and that low rents prevailed all over the Pargana, i.e., no standard of comparison existed, I do not think more could have been done than was done by Babu Akshay Kumar Sen.

These two blocks are somewhat similar in character, and contain the most fertile and highest rented lands in the District.

Block VI and Block VII—
Kotrahang and Paschimduai.

The general incidence at the last settlement was no less than Rs. 2-1-0 per acre and has now been raised to Rs. 2-10-6 in Kotrahang and Rs. 2-13 in Paschimduai. The difference is due to the fact that in the latter there were more good lands available for reclamation.

The two blocks suffer from no special disabilities except in a year of scanty rainfall.

It would be unsafe to draw deductions from the pure *thani* figures in the two blocks; we may only say that there is a tendency on the part of high rented *thani* land to lapse; but a glance at the *thani pahi* figures, which in the case of these Parganas contain a great deal of *thani* shows that the incidence of *thani-pahi* is practically the same as the *thani* incidence of the last settlement in both blocks.

The increase of the *pahi* incidence in both blocks is satisfactory, especially in Paschimduai, where better land was available. The following figures are interesting:—

Incidence of rents as now settled per acre.

Block.		Thani.			Thani-pahi.			Pahi.		
		Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
Kotrahang	...	2	10	2	2	15	4	2	13	2
Paschimduai	..	2	5	0	2	13	0	3	4	0

In Kotrahang proprietors' lands have been somewhat favourably valued, i.e., at Rs. 2-5-5 per acre, but they are generally inferior to the raiyati lands.

The increase of cultivation amounts to 16½ per cent. and 21 per cent. respectively, while assets have risen by 49 per cent. and 67 per cent. Notwithstanding the fact that 70 per cent. was taken as revenue in the blocks at the last settlement and now only 60 per cent. has been taken, we have increases of revenue amounting to nearly 20 per cent. in Kotrahang and 37 per cent. in Paschimduai.

As this block has formed the subject of a separate report to the Board

Block VIII—Parubduai and Oldhar
I need not go into details here (see my No. 1090 of 4th July 1899 with enclosures complete).

Government orders, Irrigation Department, No. 22T.L., of 30th April 1897 decided to leave the gap (in the Kusbhadra embankment) open and to close the breach at Bainchua.

The effect of this policy has been to throw out of cultivation lands in Parubduai and Oldhar and a few villages of Rahang, Mathatpatna and Athaisi. About 70 villages were directly and 80 villages were indirectly affected, and revenue in 90 estates has been reduced. In his No. 1100T.S., of 26th July 1898, Director of Land Records and Agriculture indicated the procedure approved by the Board, to whom reference had been made.

A reduced rent has been settled for five years, and has been recored (as well as the original rent) in the final *khatauns*.

The assessment reports give two proposals—(i) for 1306 (1899) to 1310 (1903) based on the reduced assets, (ii) for 1311 (1904), &c., based on the normal assets.

The total loss to Government is not less than Rs. 2,500 a year and probably comes up to Rs. 3,000. assets amounting to some Rs. 37,000 having been reduced to Rs. 33,000. (This includes about Rs. 2,000 of assets in Block IV.)

The matter has already gone to the Commissioner and to the Board. The Director has ordered me to prepare a separate report to be forwarded from the Revenue Department to the Irrigation Department of Government (since submitted).

This is a large Pargana toward the south of the District traversed by the Bhargabi river, from which it is more or less protected by efficient embankments, and it contains the town of Puri. On the east is a detached portion subject to the floods of the Parubduai-Oldhar tract, and on the west is a strip subject to flood from the river Nun and the Chilka. A peculiarity of the Pargana is that only 28 per

Block IX. Rahang

cent. of the total area is raiyati, the balance being chiefly occupied by *bahal* (confirmed) and *bazyafli*, (resumed) *tankidars* (quit-rent holders). The former held 20,200 acres, for which they pay Rs. 11,000, an average of nearly 9 annas per acre. *Bazyafli* rents have been enhanced from Rs. 9,900 to Rs. 18,800, or by 90 per cent. and re-settled at an average of Re. 1-5 per acre. In the comparatively small raiyati area, *thani* rents have undergone less than the usual amount of variation. The area has practically remained the same, and the incidence is as it was at last settlement. *Pahi* rents have advanced from an average of Re. 1-5 to an average of Re. 1-11, which is still below the *thani* average of Re. 1-15. Enhancement has brought the *pahi* average up to Re. 1-13 and leaves the general average at Re. 1-12. The progress *pahi* rents was not retarded in this Pargana as in Serai and Chaubiskud by the distribution at last settlement of *pahi pattas*. The Pargana was assessed a few years later than the other two when the distribution had been stopped. The intermixture of privileged tenures has on the other hand doubtless had considerable influence in the way of checking the natural rise of ordinary rents. The *pahi* raiyats are in many cases also *tankidars*. *Chandina* rents are remarkably high, being settled at Rs. 17-11 per acre, owing to the high value of homesteads with *savan* villages near Puri.

On the whole the development is as follows:—

		Last Settlement.	Present Settlement.	Difference per cent.
Assessed area	...	48,100 acres	54,600 acres	13
		Rs.	Rs.	
<i>Mufasal jama</i>	..	47,700	68,000	42
Incidence of <i>mufasal jama</i>				
per acre	...	1	1-4	25

Owing to the large *bazyafli* area Rs. 10,800, or 10 per cent., were added by the present proceedings to the assets before settlement.

Nearly the whole area is included in the Rahang *taluk*, which has been recusant for more than 85 years, but has now been re-settled with the proprietor, the Paikpara Raja.

Serai Pargana lies to the west of the Subdivision round the north end of the Chilka lake. It is bisected by the Daya river which is embanked on the east and unprotected on the west. The western half of the Pargana suffers serious inundation every year from the Daya floods and from the salt tides of the Chilka. The south-east is also liable to salt inundation. The villages to the east are assessed at average rates. Those to the west bear as a rule very low rental incidences.

At last settlement the *thani* average was Re. 1-11-4 and the *pahi* average Re. 1-5-4. The *thani* area has declined about 20 per cent. There had been a fall of an anna per acre in the incidence of *thani* and *pahi* rents before settlement, and the average incidence of all raiyats' rents had declined from Re. 1-10 to Re. 1-7. At re-settlement rents were very moderately enhanced. The settled average is Re. 1-4-9, which is lower than in any other Pargana of the District. Serai is one of the three large estates which have been managed *khas* by Government since the zamindar, the Raja of Paikpara, proved recusant in 1812; the two others are Rahang and Chaubiskud. One peculiar circumstance which has affected the history of rents in Serai and Chaubiskud, if not in Rahang, is that at last settlement *pattas* were distributed to *pahi* as well as to *thani* raiyats. The distribution of the *pahi pattas* induced in raiyats' minds the impression that the *pahi* rents were not liable to alteration. Almost the entire area of the three estates is held by intermediate proprietary tenureholders who, if they had attempted to enhance *pahi* rents, would have found the raiyats appealing to the Collector.

As a matter of fact there has been little attempt to enhance. The interests of the village settlement holders have been, if not coincident with those of the raiyats, in many cases at least closely allied to them.

Bazyafli rents have been enhanced by only 52 per cent. There is also a considerable area, 3,600 acres, of *bahal tanki*, for which rents are not liable to enhancement.

On the whole the increase in assets is as follows:

		Last Settlement.	Present Settlement.	Difference per cent.
Assessed area	...	25,400 acres	31,400 acres	24
Mufassal jama	...	Rs. 32,700	Rs. 40,300	23
Incidence of mufassal jama per assessed acre	...	Rs. 1-4-7	Rs. 1-4-7	

Considering how low rents are, the increase given by the present settlement Rs. 2,300, or less than 7 per cent., appears little, and raiyati rents which have scarcely been touched are no doubt very light.

Balbhadrapur Pargana, which is folded within Serai, belongs to the Government estate of Kharda, and we find that remissions of rent for either flood or drought in Balbhadrapur amounted in the last 15 years to nearly 3 annas in the rupee. Thus it is not surprising that, but for the increase of cultivation, assets in Serai are stagnant.

I do not think the work was done so thoroughly here as in other parts of Orissa, but even so the lands cannot afford to pay high rents, and probably an all-round incidence of more than Re. 1-5 would create hardship.

Serai consists almost of one estate, recusant for 85 years and now re-settled with the Paikpara Raja. It was proposed to take 60 per cent. as revenue, so that Government might get some return for the 6,000 acres of increased cultivation, but the Board decided to give 55 per cent. to avoid applications for remissions. The increase of revenue is thus nominal, i.e., from Rs. 21,800 to Rs. 22,400.

This Pargana, which lies round the east shore of the Chilka in the south of the District, is traversed by the last portion of the Bhargabi and its many distributaries. It is protected from the main stream by embankments which hold good in ordinary years, but it suffers inundation frequently from the back flood water at the Bhargabi mouth and from the salt tides of the Chilka. It is less liable to damage than Pargana Serai, and was more heavily assessed at last settlement, than rents averaging Rs. 2 and *pahi* Re. 1-8, and the general raiyati incidence being Re. 1-13. The recorded *thani* area has declined about 60 per cent. This is partly due to confusion of record, some recorded *thani* lands of last settlement having been now recorded as the *nij-jot* of proprietary tenureholders. It is also probably due in part to the confusion of *thani* and *pahi* rights by the issue of *pahi pattas* at last settlement. The raiyat did not trouble to preserve and fight for a distinction which had become to his mind obscure. The incidence of *thani* rents remained the same as at last settlement, and was little affected by re-settlement proceedings. The incidence of *pahi* rents rose during the settlement from Re. 1-7-11 to Re. 1-9-3, and has been raised by the present proceedings to Re. 1-10-9. The fiscal history of the Pargana being similar to that of Serai, the same causes were at work in both to retard the natural advance of rents.

The following figures show the development of assets in this area:—

		Last settlement.	Present Settlement.	Difference per cent.
Assessed area	...	24,000 acres	30,900 acres	29
Mufassal jama	...	Rs. 35,800	Rs. 49,000	37
Incidence of mufassal jama per assessed acre	...	Re. 1-8	Re. 1-9	...

Owing to the fact that only 65 per cent. was taken as revenue at the last settlement, and now 55 per cent. has been taken, the increase of revenue is only 16 per cent. I proposed to take 60 per cent., but the Board reduced the proposals to 55 per cent., so as to avoid applications for remission.

This is a small Pargana lying south of Antrodh between the Kusbhadra and Kadua channels. The level of the Pargana is fairly high, and it does not suffer much from the overflow of these two rivers in time of flood. The country is fairly fertile. *Thani* rents were assessed high at last settlement, and *pahi* rents nearly 50 per cent. lower. There has been a lapse of *thani* area and a slight fall in

Block XII—Ranchas.

incidence, while rents *pahi* have made a marked advance and now stand higher than *thani*.

The *thani* incidence of the last settlement was Rs. 2-5. During the course of settlement there was a fall to Re. 1-15, and it is now raised to Rs. 2-1, but some good *thani* lands have been recorded as *thani-pahi*, the new incidence of which is Rs. 2-3.

There has been a very satisfactory increase in *pahi* incidence from Re. 1-6 to Rs. 2, and raised in the present proceedings to Rs. 2-2.

In this block *nisfi bazyafli* was specially lowly assessed; thus the enhancement appears high, i.e., from an incidence of As. 7 per acre to Re. 1-2, but the new incidence is practically the same as the general *nisfi bazyafli* incidence of the District, i.e., Re. 1-2-2, and compares very favourably with the *pahi* incidence of Rs. 2-2.

It is to be noticed also that there is an excess area of 150 acres, probably taken from the higher rented *kamil bazyafli*.

The extension of cultivation has been very small, only 18 per cent., but the general incidence having risen from Re. 1-9 to Re. 1-15, the increase of assets is 43 per cent. Revenue at the last settlement was taken at 66 per cent., and is now taken at 59 per cent., thus the increase of revenue is nearly 25 per cent.

There remain only the *tahsilalahida* Parganas of Kalijori, Saidabad, and Sultannagar and one estate of Kotdes having Block XIII.—Scattered estates. widely scattered lands.

These, as is natural, got off with a very light assessment at last settlement, *thani* raiyats paying an average of only Re. 1-12 and *pahi* raiyats of Re. 1 per acre. A quarter of the *thani* lapsed during the settlement and there was a slight falling off in the incidence of rents, while *pahi* rents rose to Re. 1-11 per acre.

Very moderate enhancements have been made, and raiyati rents settled at an average of Re. 1-12 per acre.

The development of assets is shown in the following figures:—

		Last Settlement	Present Settlement.	Difference per cent.
Assessed areas	...	10,400 acres	13,000 acres	25
<i>Mufassal jama</i>	...	Rs. 10,500	Rs. 20,300	95
Incidence of <i>mufassal jama</i> per acre	...	Re. 1	Re. 1-9	56

The enhancement of assets in this settlement is 14 per cent., more than half being contributed by *bazyafli*.

Part II.

546. I have now to deal with some of the results of settlement of revenue, and propose to take up the subject in the following order:—

(I) Financial results of early revenue settlements with a comparison of revenues up to date.

(II) Results of the present settlement—

(1) General results.

(2) The percentage of assets retained as revenue.

(3) Incidence of the revenue.

(4) Effect of the new revenue on zamindars.

Effect of the new revenue on proprietary tenureholders.

Financial effects of the *rasadi* proposals for revenue both as regards loss to Government and gain to the zamindars.

(7) Objections to assessment of revenue and recusancy.

(8) Kists.

In sub-section 7 I have included some discussion of the objections to the form of *kabuliyat*, and a brief account of the six recusant estates. I have also shown the loss to Government by our failure to bring all the new revenue in for Amli 1305, A.D. 1898, page 397.

The increase of Government revenue is rather more than 52 per cent. Looking to the despatch by the Secretary of State No. 110 of 23rd June 1898, I would wish to clear up any misapprehension which may exist regarding the enhancement of revenue. It is stated that "the net enhancement of the revenue will be about 47 per cent., instead of from 56 to 68 per cent. as had been previously anticipated."

It will be remembered that in their letter of 13th October 1897, the Government of India took two sets of figures—one supplied by me and one supplied by the Director. Moreover, 55 per cent. of the assets was calculated in each case. Thus the increase of the revenue according to my figures was 56 per cent., and according to the Director's figures 68 per cent. It will be seen that in the present figures 54 per cent. (in Cuttack only 53 per cent.), has actually been taken instead of 55 per cent., and that the actual increase of revenue has exceeded 52 per cent. I have explained this to show that the only reason for a smaller increase of revenue is the fact that a smaller percentage of the assets has been retained for Government than was originally provided for, this smaller percentage having been taken under the orders of Government.

547. It is necessary to preface all comparisons of early revenues with the remark that there is no record for exact comparison of the areas for which the revenues are stated, and the conversion into rupees from cowris is not made at a constant rate, nor is it possible to determine in all cases whether rupees* are "Sicca" or "Arcot" or "Dasmashch" or "Company." In this paragraph, therefore, I shall only bring together some historical records of the revenues, and in the next paragraph shall give figures more accurately comparable with the area under report.

"In the absence of any regular historical documents," writes Mr. Ewer, Commissioner of Cuttack in 1818, "it may be conjectured from various recorded facts and surviving monuments that Cuttack, at the time of the Mughul conquest, was in a vastly more flourishing and civilised condition than we now find the country.

In 1174A.D. we find that Raja Ananga Bhim Deo, in a speech preserved in the Puri Temple Records, returns his revenue, including that of his dependent (?) principalities at 35 lakhs of *marks* of gold (Stirling tells us that a *mark* is equal to 5 *mashas* in weight, but deliberately refuses to guess its value; at the present day a *mark* is 90 grains troy).*

In the Ain-i-Akbari we find the revenue of the sircars Cuttack and Bhadrak, with part of Jaleswar, returned at 17 lakhs Sicca rupees. I understand that this sum represents the financial results of the settlement started by Todar Mal and completed by Man Singh in 1592A.D.

In 1748A.D. "the Soubah of Cuttack was ceded to the Berar Mahrattas by Aliverdi Khan in commutation of the *chout* or tribute of 12 lakhs demanded by them from the provinces Bengal, Behar and Orissa." (Ewer.)

Mr. Ewer further quotes Mr. J. Grant as follows:—

The district yielded from a *hastabud* in the beginning of the present (18th) century Rs. 22,58,000 of sorts, including a net *jama* of Rs. 13,91,522 lately increased to 16 lakhs.

He then gives the reported *jama* of the Mahrattas at 15 lakhs of Arcot rupees, but says that it was not often collected.

From 1758 to 1763 we read in Stirling that Sheo Bhat Santra made an assessment amounting to 18 lakhs of Arcot rupees. From certain accounts furnished to Mr. Stirling by the family of the Mahratta Dewan he finds the Mahratta revenue as follows:—

				Ra.
Payable to Nagpur	...	...	...	6,00,000
Expenses of troops	...	...	...	9,00,000
				<hr/>
	Total	...	15,00,000	said to be
				equal to 13½ lakhs Sicca rupees.

* See Asiatic Society Journal, Volume LXI, Part I, page 43. "Troy weights and general measures of Ancient Orissa" by Babu M. M. Chakravarti. On page 49 36, *marks* of gold are said to be worth Rs. 71,31,312.

It is perhaps unprofitable to pursue closely the subject of the financial results of the early settlements, but it is interesting to note that during the last 40 years of the eighteenth century four settlements by Sheo Bhat Santra, Shambha Ji Ganesh, Raja Ram Pandit and Tukaji Sukh Doo are reported to have raised the demand from somewhat more than 11 lakhs Sicca to 16 lakhs. In these figures both Khurda and the Tributary States appear to be included, but we have ample records to show that the full demands were never realised. In all the foregoing figures there is great uncertainty, but in paragraph 54 of Mr. Ewer's Report of 1818 we find that excluding Khurda the Mahratta demand in 1803 was Rs. 10,81,000 (Sicca). This amount seems to include the contribution by the *Gahjals* or Tributary States. Mr. Toynbee at page 35 of his history gives the Moghul revenue (including Khurda and the Tributary States) at less than 16 lakhs standard rupees, and less than 14½ lakhs standard rupees under the Mahrattas, but he adds that the Mahrattas never collected this sum, and probably the realisable jama for 1803-1804 was 12 lakhs. Assuming Rs. 10,81,000 (Sicca) as the revenue of the Province (including the Tributary Mahals) we find that Messrs. Ker and Groome increased it by one lakh (Sicca) rupees. This was again raised by the triennial settlement of Mr. Webb in the following year to Rs. 12,39,000 (Sicca). The increase was partly due to the conversion* at 4 *kahans* of *comris* to the rupee instead of 4·2, and to some extent to the extension of cultivation after its contraction during the time of Mahratta misrule (see Mr. Toynbee's History, page 36).

Subsequent additions were made to the revenue by the settlements of Messrs. Buller and Richardson, till an increase of 3 lakhs Sicca over the Mahratta demand was obtained. Mr. Ewer, writing in 1818, finds the area of Orissa (excluding Khurda and the Tributary States) to be 6,300 square miles. He has not of course included the area north of the Subarnarekha, which was then part of Midnapur, nor the permanently settled and *pankas* mehals. His paragraph 61 (report of 1818) shows that his figures are conjectural. The revenue of this area he returns at Rs. 14,39,000 Sicca rupees, and the incidence at 10 annas Sicca per bigha of 1,600 square yards (see Chapter X, paragraphs 248 to 254).

In 1821 we find in Stirling the following figures:—

	Rs.
	(Sicca).
Moghulbandi (excluding Pataspur ...	12,64,370
Khurda ...	61,169
Zamindaris of the Tributary Chiefs ...	1,20,411
Total ...	14,45,950

Expressed in Company's rupees Mr. Toynbee gives the demand from 1819-20 to 1821-22 at Rs. 15,27,834 as against Rs. 13,14,825 (Company's rupees) in 1804-05 (Appendix I of Mr. Toynbee's History).

548. I turn now specially to the area dealt with in this report.

The above figures show a gradual increase of revenue from the time of the conquest, and notwithstanding the enormous increase of cultivation the assessments were founded on little or no detailed information. Mr. Ewer wrote:—

The jama of Cuttack (the Province of Orissa) has, however, notoriously been fixed or at least *augmented* at hazard, without any satisfactory ascertainment whatever of the real value and capabilities of the estates from which an increase has been levied, and in consequence of defective information on which the revenue authorities have hitherto proceeded. Some weight must be attached to the frequent and vehement complaints on the subject preferred to me during my tour through the district by all classes of cultivators and proprietors, raiyats, mokaddams, sarbarakars and zamindars.

Mr. Ewer goes on to depict the extraordinary changes brought about by sales, public and private, during the first few years of this century. He says that out of 3,000 Uriya proprietors of the settlement papers dated 1806, only 1,449 survived in 1818, and they were only responsible for a revenue of

* Asiatic Society Journal, Volume LXI, pages 47-48-49, shows rates of conversion in Orissa varying from time to time.

Rs. 4,60,000, and from that some Rs. 1,50,000 should be subtracted for the estates of Lembai and Kotdes which had been treated with special leniency. He concludes by stating that "the original proprietors of lands paying only a jama of about Rs. 3,00,000 are in possession of their estates at the present moment when the jama of the Moghulbandi is 13,93,000, a statement which evinced strikingly the extensive ruin which had overwhelmed the ancient landed interests of the country under the British administration."

We find that in 1806-07-08 the estates sold fetched prices amounting to half the *sadar jama*, while in 1809 to 1812 the price was 20 per cent. more than the *sadar jama*, and in 1813 to 1816 it was 40 per cent. more. Mr. Toynbee's History concerning the early settlements may well be read in this connection (pages 23 to 58). An account is also given in Chapter X of this report.

I think it is best for purposes of comparison of increase of revenue to take the detailed statement given on page lxxviii of Mr. Toynbee's History, converting Sicca rupees into Company's rupees. By exclusion of figures for Khurda and the Tributary States we find the demand for—

			Rs.
1819-20	...	...	13,39,000
1804-05	...	...	11,02,000
Increase			2,37,000

549. On the subject of increase of revenue it is interesting to record the following extract from Stirling's History, written in 1821:—

"The revenue derived from the salt monopoly exceeds the total amount of the land rents paid to the State, and is entirely the creation of the British Government. The salt sold within the Province yields a net return of about 3 lakhs, and the quantity annually exported to Calcutta for public sale at the Salt Office produces little short of from fifteen to sixteen lakhs. Under the heads of customs, tax on spirituous liquors, and tax on pilgrims, a further net revenue of about one lakh per annum is obtained by the present Government. The value of Cuttack to the Company, therefore, after deducting expenses of management, may be fairly assumed at upwards of thirty lakhs of rupees per annum."

It is perhaps superfluous to add that by Cuttack Stirling meant almost the same area as our present Province of Orissa. Mr. Stirling, however, does not give us the other side of the picture. In 1818 Mr. Ewer wrote:—

"I shall say that taxation having considerably increased upon them (the people of Orissa) under the Company's Government, so as fully to keep pace with any improvement of their means and resources, and in the instance of the salt tax I fear it has rather anticipated the capability of the people to sustain new burdens; the operation of the Revenue Regulations having dispossessed and ruined upwards of two-thirds of these original proprietors who possessed the goodwill and the confidence of the great mass of the agricultural population."

550. In Mr. Moffat Mills' Minute, (printed on page clxxii, *et seq.* of Revenue of Orissa, 1804 to 1828. Mr. Toynbee's History under section entitled "*Malikana*"), the amounts of revenue are given in Sicca rupees and the heading "Moghulbandi" includes Khurda. I have therefore reduced the Sicca rupees in the heading Moghulbandi to Company's rupees (at the rate of 97 to 103) and deducted the *jama* of Khurda. The balance shows the demand settlement by settlement for the temporarily settled area dealt with in this report. The figures in this list are expressed in Company's rupees:—

Under Regulation.	Total revenue.	Deduct jama of Khurda.	Balance.
	Rs.	Rs.	Rs.
1804 } Regulation XII. of 1805	12,84,000	1,06,000	11,78,000
1805 } Ditto	11,95,000	1,06,000	10,89,000
1808 } Regulation VI. of 1808	12,03,000	1,14,000	10,89,000
1809 } Ditto	11,58,000	1,14,000	10,44,000
1811 } Regulation XIII. of 1811	13,83,000	1,14,000	12,69,000
1812 } Regulation I. of 1813	14,25,000	1,14,000	13,71,000
1816 } Regulation XIII. of 1815	14,95,000	1,14,000	13,81,000
1820 } Regulation VI. of 1815	13,90,000	50,000	13,40,000
1821 } Regulation VI. of 1816	14,20,000	50,000	13,70,000
1828 } Regulation XIII. of 1818	14,85,000	1,04,000	13,81,000

The figures given above have not been reconciled with Mr. Toynbee's Appendix I (page 96), because the latter appear to include permanently settled areas and Tributary States and Khurda. I have taken Mr. Mills' figures because they compare most closely with the temporarily settled area under report. It is true that Mr. Ewer in paragraph 227 of his report of 1818 describes the Moghulbandi as follows:—

"The Moghulbandi, as is well known, comprises all that plain and open part of Orissa from the Subarnarekha to the borders of Khurda, which paid a regular assessment to the Moghul Government."

Nevertheless it appears that from Mr. Mills' figures the jama of Khurda is to be deducted, i.e., from the jama under head Moghulbandi, because if he had included the jama of Khurda under head "Killas," the amount under that head would have been much greater.

The difference between the figures quoted from Mr. Toynbee's History and Mr. Mills' Minute for 1805 and 1820 is comparatively slight, being Rs. 13,000 in the former case and Rs. 1,000 in the latter.

551. To take an illustration of the somewhat rash manner in which revenue was enhanced at the beginning of the century in the course of the early British settlements the following figures for Cuttack District are interesting:—

Enhancements of revenue in Cuttack, 1804, up to date.

			Ra.
Demand for	1804-05	...	4,48,000
	1805-06	...	6,32,000
	1808-09	...	6,42,000
	1809-10	...	7,11,000
	1812-13	...	7,10,000 decrease
	1813-14	...	7,25,000
	1815-16	...	7,18,000 ditto
	1816-17	...	7,16,000 ditto
	1819-20	...	7,17,000
	1821-22	...	7,30,000
	1822-23	...	7,30,000
	1837-97	...	7,06,000 ditto

N.B.—In these figures Pargana Gagra Damarpur is included.

The demand for the settlement which has just expired was actually less than that of 1809-10.

552. In the chapter on Early Revenue Settlements (Chapter X) some account of the fluctuations in revenue has been given, together with an account of the procedure adopted under Regulation VII of 1822 in the settlement which has now expired. It is only necessary to say here that in the settlement from 1817 to 1820 the revenue was reduced by nearly half a lakh, and from 1821 to 1823 the revenue also reduced. This settlement was extended for 5 years with a small increase, after which there was a small further increase. It was not till 1831 that systematic proceedings for re-settlement commenced, and though the settlement which has just expired came into force nominally from 1837, all the *mahals* were not settled till 1843 and the accounts were closed on 30th April 1845.

553. I propose now to make a further comparison of revenues.

Comparison of revenues of the century. Taking the figures already quoted for 1804-05 and 1820, and taking the figures for the settlement concluded in 1845 as given by Mr. Commissioner Gouldsbury, we have the following results:—

Temporarily settled area.	Revenue demand of 1805	Revenue demand of 1820.	Revenue demand of 1845.	Revenue demand up to 1897 according to Collectors.	Revenue settled in 1897 up to 99.
	Ra.	Ra.	Ra.	Ra.	Ra.
Cuttack ...	...	...	7,19,300	7,13,300	10,98,400
Puri (excluding Khurda) ...	10,89,000	13,40,000	3,39,000	2,92,800	3,76,700
Balasore ...	...	...	3,85,200	3,78,000	6,27,800
Total ...	10,89,000	13,40,000	14,34,500	13,84,100	21,02,900

The somewhat large discrepancies between the Puri figures in columns 4 and 5 are explained by the fact that the three large estates of Serai, Chaubiskud and Rahang were recusant at the last settlement. Thus the figure in column 4 for Puri includes the whole *mufassal jama* of these estates except the *malikana* allowance of 9 per cent., whereas in column 5 only the Government revenue at 60 per cent. of the *mufassal jama* is included. In Cuttack there is a slight decrease in column 5 on account of acquisition of lands for irrigation purposes and consequent rebate of revenue. In Balasore I attribute the decrease in column 5 to changes of boundaries of the District.

The above figures refer to the temporarily-settled area in Orissa, excluding Khurda, the *sadar jama* of which has been raised by the same agency (the Settlement Officer of Orissa and his Assistants) from Rs. 2,51,000, the demand of 1896, to Rs. 3,06,000. In addition to the above, Government receives the following revenues:—

					Ra.
Tributary States	...	...	...	...	33,300*
Cuttack—Permanently-settled estates	...	...	...	...	79,700
Puri Ditto ditto	...	...	...	...	3,300
Balasore Ditto ditto	...	...	...	...	34,800
					<hr/>
					1,51,100
Add—Khurda	...	...	...	...	3,06,000
The temporarily-settled area of this report, viz., 6,346 estates and the <i>killajats</i>†	...	...	...	...	21,02,900
					<hr/>
Total				..	25,60,000

554. Before discussing the results of settlement of revenue I give a summary explanation, which may be regarded as applicable to all the figures. It has been already given in paragraphs 512 and 545, but is repeated in order to save reference. Cuttack was not only highly assessed at the last settlement, but the area fit for extension of cultivation was (comparatively) less than in Balasore. Again, Puri was not only highly assessed, but had a much smaller area fit for extension of cultivation than Cuttack, and in addition to this the best lands were already occupied by highly assessed privileged tenants, i.e., *thani raiyats* and *bazyafidars* (see my No. 2776 of 31st December 1897, Appendix A, No. 13). The *thani raiyats* are still paying very high rents as compared with the *pahi*. Moreover, *bazyafli* lands in Puri were more highly assessed than in other parts of the Province, and the increase on that head is comparatively small. As for revenue, in Puri at the last settlement 70 per cent. of the assets was taken as revenue far more frequently than in the other two districts; in fact, in the other two districts 65 per cent. was usual, 60 per cent. was only found as an exception, and 70 per cent. was very rare. It may be added that in a few estates created out of resumed (*bazyafli*) tenures having an area of more than 75 acres only 50 per cent. of the assets was taken as revenue. Lastly, in Balasore the incidence of rents was low at the last settlement, and the area for extension of cultivation comparatively unlimited. Moreover, in 1831 a storm-wave had devastated large cultivated areas and estates on the sea-face, so that even by the time of the last settlement the lands had not recovered. During the last 60 years there has been comparative immunity from such calamities, and the lands have speedily come under cultivation. The general result of the present proceedings is that revenue for 6,351 estates has been raised from Rs. 13,84,000 to Rs. 21,03,000.

To turn to general figures for revenue—

The high percentage taken for revenue at the last settlement has been set forth above. In the present settlement, thanks to the liberality of Government, only 50 per cent. to 55 per cent. of the assets has generally been taken as revenue. We may therefore for the purposes of comparison say that whereas at the last settlement Government took 64 per cent., only 54 per cent. has now been taken.

* See also paragraph 593.

† An account of *killas Ragri, Chausipara, Balarampur, Ambo, and Mangalpur* is given in paragraph 610. See also paragraph 263.

This fact of course makes a very great difference in the increase of revenue. In the figures for revenue the large Government estates obscure the percentages, because in a Government estate the figures read that no allowances are given to proprietors, the percentage retained for revenue being 100 per cent. Eliminating Government estates, the percentage taken as revenue works out to 54 per cent.

Totals for revenue, excluding *khas mahals*, are as follows:—

District.	AT LAST SETTLEMENT.		AT PRESENT SETTLEMENT.		INCREASE.		EFFECT OF ZAMINDAR'S INCOME.		DIFFERENCE.	
	Per- cent- age.	Amount.	Per- cent- age.	Amount.	Per- cent- age.	Amount.	Former income.	Income after settlement.	Per- cent- age.	Amount.
1	2	3	4	5	6	7	8	9	10	11
Puri ...	66	Rs. 2,89,100	58	Rs. 3,71,800	28	82,700	2,78,600	2,65,200	— 5	— 13,400
Cuttack ...	64	7,13,300	53	10,98,400	54	3,85,100	11,21,300	9,48,200	— 15	— 1,73,100
Balasore	65	3,52,000	53	5,92,400	68	2,40,400	5,98,800	5,14,700	— 14	— 83,600
Total ...	64	13,54,400 (excluding <i>Khas Mahals</i>).	54	20,62,600 (excluding <i>Khas Mahals</i>).	52	7,08,200	19,98,200	17,28,100	— 14	— 2,70,100

555. The general percentage now retained as revenue in the above state-

The percentage of the assets retained as revenue.

ment works out by actual calculation to 54. In Part IV, Chapter XX, I have set forth the general rules and the special considerations which led me to propose the different revenues for different estates. As applied generally to each district it may be said that Government, having expended large sums on irrigation and protection in the Cuttack District, I was induced, where possible, to propose 55 per cent. rather than 50 per cent. on that account. On the other hand, in certain Parganas of Puri, e.g., Kotrahang, where 70 per cent. had been taken as revenue, it was impossible to make proposals at less than 60 per cent. without reducing the Government revenue or in certain cases unnecessarily raising the proprietor's income. The figure 58 per cent. for Puri is of course enormously increased by the estates of Kotdes and Dolang (Lembai), the revenue of which make up more than two-fifths of the revenue of the District. In these estates 60 per cent. was proposed as revenue, and the assessments have been confirmed by the Board. Both estates have been grossly mismanaged for several years and yielded a very small increase of revenue. That the general percentage of 58 per cent. is not severe to the proprietors may be gauged by the fact that their loss of income is only 5 per cent. while Government has only reaped a benefit by increase of revenue amounting to 28 per cent.

In Balasore the increase of revenue has been so large that generally more lenient proposals have been made.*

556. The incidence of land revenue per assessed acre works out to

Rs. 1.35 in Cuttack, Rs. 0.90 in Balasore, and Rs. 1.09 in Puri. The discussion of rents and

revenues according to blocks will explain the variations in local areas, and may be referred to. If a summary criticism were of any value it might be said that though the District contains the best lands as well as lands accessible to irrigation, the incidence in Cuttack was fully high enough for the present, that the large area for extension of cultivation has not yet permitted the Balasore incidence to rise as high as it will in the future, while in Puri the mismanagement of zamindars in certain areas has checked the growth of the incidence of rents as well as revenue. In the special report of every estate, as well as in the covering or block reports, the sufficiency of the revenue proposed for each estate is set forth with details, and there is no space here for particulars.

557. We find that zamindars throughout the Province are called upon

Effect of the new revenue assessment on zamindars.

to pay an increase of revenue amounting to Rs. 7,21,000,† and that they will collect by increase of rents Rs. 4,58,000. Thus the loss of income on paper is Rs. 2,63,000, or 13 per cent., the income before settlement amounting

* See also paragraph 550.

† Including the increased demand from *khas mahals*.

to Rs. 20,27,000 and after settlement to Rs. 17,64,000* as against only Rs. 7,56,000 at the last settlement.

The following statement shows the true effect of the present assessment on the income of the zamindars:—

		Assets.		
		Last Settlement.	Existing.	Settled.
		Rs.	Rs.	Rs.
<i>Tanki bahal</i>	...	13,700	13,500	13,500
<i>Kharida jamabandi</i>	...	43,800	41,400	65,800
<i>Other tenure-holders</i>	...	200	2,800	5,200
<i>Kamil bazyasti</i>	...	68,800	40,300	61,500
<i>Nisfi bazyasti</i>	...	94,600	91,700	2,38,500
<i>Thani raiyats</i>	...	7,65,300	1,98,400	2,11,400
<i>Thani-pahi raiyats</i>	...	...	5,10,900	5,39,900
<i>Pahi settled and occupancy raiyats</i>	...	8,95,700	19,83,500	21,07,800
<i>Pahi non-occupancy raiyats</i>	...	...	33,200	45,100
<i>Chandina non-occupancy raiyats</i>	...	78,000	41,000	41,700
<i>Chaukidari jagir resumed</i>	...	...	...	43,000
<i>Other " " "</i>	...	...	...	16,700
<i>Tenancies now fully assessed to rent</i>	...	600	4,700	12,800
<i>Tenancies valued for revenue</i>	...	200	29,700	46,200
<i>Nijot and nijchan</i>	...	1,47,300	3,84,500	3,84,500
<i>Culturable waste</i>	...	5,200	...	100
<i>Tunki tenures now included in bazyasti</i>	...	1,400	...	...
<i>Sairat</i>	...	23,400	34,000	34,000
Total	...	21,38,200	34,09,600	38,67,700
<i>Deduct tenancies valued for revenue and resumed chaukidari jagir</i>	...	200	29,700	89,200
		21,38,000	33,79,900	37,78,500
<i>Add 15 per cent. of resumed chaukidari jagir</i>	...	...	...	6,400
		21,38,000	33,79,900	37,84,900

We may therefore say that the increase of assets of which the zamindars will be able to partake amounts to Rs. 4,05,000, and the increase of revenue which they will have to pay amounts to Rs. 6,85,000, exclusive of the Chaukidari Fund, the actual loss of income being Rs. 2,80,000 as against the paper loss of Rs. 2,63,000.

The following comparative table (in lakhs of rupees) will show the effect on the incomes of the zamindars:—

		Assets.	Revenue.	Income of zamindars
<i>Last settlement</i>	...	21.38	13.82	7.54
<i>Existing</i>	...	34.09	13.82	20.25
<i>Existing after settlement</i>	...	34.09	18.74	15.35
<i>Now added</i>	...	4.58	2.29	2.29
Total settled	...	38.67	21.08	17.64

From the above sets of figures it will appear that the income of the proprietors on paper is reduced (in lakhs of rupees) from 20.27 to 17.64, or by 2.63; but the actual reduction is greater, i.e., they will have to pay 7.21 more and will receive 4.41 more and will suffer a loss of 2.80, being rather less than 14 per cent.

* Excluding khas mahal figures, Rs. 19,98,000 and Rs. 17,28,000 respectively.

558. Some account must also be given to show the effect of the assess-

Effect of the new revenue assess-
ment on the proprietary tenure-
holders.

ment to revenue on the incomes of the proprietary
tenure-holders.* The rules which have been fol-
lowed are referred to in Chapter XX of Part V
and are detailed in Part IV of Appendix C to this report.

The result of re-settlement has been to raise the amounts payable by
proprietary tenure-holders from Rs. 3,27,700 to Rs. 4,72,100 by increments
extending over several years.

Their allowances amounted at the last settlement to Rs. 77,600 or 19 per
cent. of the *mufassal jama*; by 1896 their incomes (nominal) had risen to
Rs. 2,47,700 and by the re-settlement are eventually reduced to Rs. 1,78,800
or 27½ per cent. of the gross assets. The nominal ultimate loss to the tenure-
holders is therefore 27·8 per cent. of their incomes before settlement.

The general principle followed has been to give the benefit of any increased
allowances to the tenure-holder and not to reduce his income by more than
20 per cent. for the first two years, nor ultimately (*i.e.*, after the *rasadi* period)
to reduce his original income by more than 36 per cent. An illustration may
be given as follows:—

Assets at last settle- ment.	DISTRIBUTION OF ASSETS AT LAST SETTLEMENT.			Assets at present settled.	Assets as now settled.	DISTRIBUTION OF ASSETS FOR 1905 AND 1906, 1908* AND 1909.			DISTRIBUTION OF ASSETS FOR 1907 (1900) TILL RASADI OF SETTLEMENT.		
	To tenure- holder 20 per cent.	To pro- priator 20 per cent.	To Govern- ment 60 per cent.			To tenure- holder 25 per cent.	To pro- priator 20 per cent.	To Govern- ment 55 per cent.	To tenure- holder.	To pro- prio- tor.	To Govern- ment.
1	2	3	4	5	6	7	8	9	10	11	12
100	20	20	60	200	250	62 8	60	137 8	62 8	50	137 8
						+33 8	— 9	—24 8	+14 8	— 4	—10 8
						96 0	41	113 0	77 0	46	127 0
		Chaukidari Fund			5	1 0	...	1 0	1 0	...	4 0
						97 0	41	117 0	78 0	46	131 0

* 1908 is the year in which the revenue of 1905 is paid

The existing income of the tenure-holder is 200—80 = 120; this income
reduced by 20 per cent. amounts to Rs. 96. Now 25 per cent. of the new
assets, Rs. 250, only amounts to Rs. 62·8; Rs. 33·8 is therefore to be added
to make up Rs. 96. It is deducted from the shares of the proprietor and the
Government in the proportion of 20 to 55. After the first two years the
tenure-holder's income may be reduced if necessary till it is 36 per cent. of
his original income. In the above illustration a further reduction of Rs. 19
may therefore be made, Rs. 96—19 = 77. If from this Rs. 62·8 be deducted,
the concession to be given for the remainder of the term of settlement amounts
to Rs. 14·8, payable by the proprietor and Government in the proportions of
20 to 55 per cent. or in round figures Rs. 4 and Rs. 10·8. In a few cases it has
not been necessary to sacrifice Government revenue by carrying out this rule, *e.g.*,
in cases where the zamindars own the largest share of, or the whole of, the
tenure, or where there has been fraud or the tenure-holder is known to be very
wealthy. In fact this rule has been followed in cases where there has been
an enormous increase of assets and where by taking the percentage allowed to
the tenure-holder at the last settlement, or even 5 per cent. more, the loss of
income would be ruinous. It may be said that generally the tenure-holder has
been allowed to retain from 5 to 20 per cent. more allowance than he received
at the last settlement; exceptions have, however, been made in cases where
fraud and collusive record of low rents have been discovered.

A list of the proprietary tenure-holders who have been assessed to revenue
has been given in the Appendices GA to HC. †

The Government orders No. 2367L.R. of 5th August 1897, Board's No. 834A. of 28th July 1897, Director of Land Records No. 250T.—S. of 15th July 1897, and No. 140T.—S. of 13th July 1897, and my No. 1336 of 18th June 1897, may be perused in connection with the assessment to revenue of the proprietary tenure-holders or "sub-proprietors." Two points should be borne in mind; firstly, that only the *mugaddams*, *padhans*, *kharidadars* of the first class, and *shikmi* zamindars get *malikana* on recusancy, and a right of re-entry belongs only to the *padhan*, and probably to the *shikmi* zamindar and *parsethi kharidadar*; secondly, that any allowances given at this settlement in excess of the allowances given at the last settlement are merely temporary concessions. At a future settlement the sub-proprietors are only entitled to such percentage of allowances as they retained at the settlement of 1837-45. These allowances are as follows* :—

<i>Shikmi zamindars</i>		All the proprietary allowances in some cases and all except 5 or 10 per cent. in others.
<i>Mugaddam</i>	..	20 per cent.
<i>Padhans</i>	..	25 per cent., rarely.
<i>Maurasi sarbarahkars</i>		20 per cent.
<i>Parsethi kharidadars</i>		{ 15 per cent.
		{ 20 per cent., rarely.
		Usually 30 per cent.

550. I have already mentioned in Chapter XX the fact that permission was given to make proposals for *rasadi* increase of revenue. In that chapter some account of the nature of these proposals and the principles of their application has been given.

The *rasadi* term ranges from one year in the case of some estates to 10 years in the case of a few. I have arranged that from 1315 (1908) the full revenue is to be collected in all three districts. The financial results of these *rasadi* proposals are as follows. [The value of the revenue demand for 11 years of each District has been calculated as well as the value of the *rasadi* terms for this period] :—

	Cuttack.	Balasore.	Puri	Total.
	Rs.	Rs.	Rs.	Rs.
(i) Totals of the revenue demands from 1305 to 1315 (1898-1908) excluding <i>killajats</i> † and <i>khas mahals</i> ...	1,15,42,000	60,92,000	40,04,000	2,16,08,000
(ii) Total value of remission involved in the <i>rasadi</i> proposals for that period ...	4,16,000	3,10,000	54,000	7,80,000
(iii) Percentage of remission to demand for that period ...	3.6		1.3	3.5

From the above figures it will be seen that for the first 11 years of the settlement the *rasadi* remissions amount to $3\frac{1}{2}$ per cent., of the demand. In 1305 (1898), the first year of the settlement, *rasadi* proposals were made amounting to 5 per cent., of the demand for that year in Puri, 11 per cent., in Balasore and more than 10 per cent., in Cuttack.

By the time we get on to 1310 (1903), the value of the *rasadi* remission will have fallen to 16,400 in Cuttack, 16,300 in Balasore, and 3,200 in Puri. At the end of 1314 (1907) they will all expire, and the full demand is to be realised in 1315 (1908).

The following statement, showing year by year the effect on the proprietors' and sub-proprietors' incomes during the *rasadi* periods, is interesting (*khas mahals* and *killajats* are excluded).

The figures show percentage of variation on the income after re-settlement, but it is to be remembered that all the new revenue was not introduced in 1305 (1898), hence the fact that proprietors' incomes are shown as increased in that

* See also paragraph 508.

† For *killajats* see Chapter XXIV, paragraph 512.

year. The figures for 1307 (1900) show the results on completion of settlement:—

Year	1304. 1897.	1305. 1898.	1307. 1900.	1308. 1901.	1309. 1902.	1310. 1903.	1311. 1904.	1312. 1905.	1313. 1906.	1314. 1907.	1315. 1908.
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Cuttack	+ 3.1	-7.7	-9.5	-10.7	-11.1	-14.0	-14.0	-14.1	-14.1	-14.1	-15.4
Balasore	+13.3	-4.8	-5.3	-6.4	-7.0	-10.7	-10.8	-10.9	-10.9	-10.9	-13.4
Puri ...	+12.5	+1.2	-2.4	-3.0	-3.2	-3.7	-4.7	-4.7	-4.7	-4.7	-4.8
Total ...	+ 7.5	-5.6	-7.3	-8.3	-8.7	-11.0	-11.8	-11.8	-11.9	-11.8	-13.3

† The years refer to the Amli era, for an explanation of which see Appendix OA, 1805 Amli corresponds to September 1897 to September 1898, but as the revenue is payable in 1898, it is better to reckon 1898 as corresponding to 1898.

In Puri the figure for 1305 (1898) is easily explained by the fact that most of the estates contain proprietary tenures, and from the illustration given in paragraph 558 it will be at once seen that under any system of assessment in such estates, the zamindars' income must largely increase at the time of re-settlement.

As regards Balasore, it is to be remembered that the ultimate increase of revenue is 66 per cent., and that in some cases the increase of revenue has exceeded 150 per cent. For this reason very close attention to the question of the income of proprietors had to be given, and in some cases very liberal initial allowance.

As regards the proprietary tenure-holders, it will be seen from the description given in paragraph 558 that the utmost care has been taken to prevent the initial reduction of income by more than 20 per cent., and the ultimate loss by more than 36 per cent. The results on the proprietary tenure-holders incomes for the first five years are as follows:—

Variations in tenure-holders' income in all estates, including khas mahals.

PROPOSED INCOME.													
NAME OF DISTRICT.	Present income	1905 (1898)		1906 (1899)		1907 (1900)		1908 (1901)		1909 (1902)		1910 (1903)	
		Income.	Per-centage of change - or +	Income.	Per-centage of change - or +	Income	Per-centage of change - or +	Income	Per-centage of change - or +	Income.	Per-centage of change - or +	Income.	Per-centage of change - or +
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Cuttack	Rs. 1,01,700	Rs. 1,17,800	+ 15.8	Rs. 99,100	- 12.3	Rs. 67,500	- 14.5	Rs. 50,400	- 20.2	Rs. 70,100	+ 22.2	Rs. 70,000	- 24.7
Puri	Rs. 59,300	Rs. 59,400	+ .16	Rs. 70,200	+ 18.2	Rs. 70,000	- .28	Rs. 60,000	- 14.3	Rs. 60,000	- .00	Rs. 60,000	- .00
Balasore	Rs. 60,700	Rs. 60,100	- .98	Rs. 61,700	+ 1.6	Rs. 61,500	- .32	Rs. 36,000	- 41.5	Rs. 32,500	- 9.7	Rs. 32,500	- .00
Total	Rs. 2,21,700	Rs. 2,37,300	+ 7.0	Rs. 2,30,000	- 3.2	Rs. 1,99,000	- 13.3	Rs. 1,46,400	- 25.1	Rs. 1,62,600	+ 11.1	Rs. 1,62,500	- .06

Most of the new assessments did not take effect till 1309 (1902).

It is to be remembered also that these proprietary tenure-holders almost invariably have large areas of *nijchās*, the valuation of which at village rates bears a very small proportion to the profits arising from the cultivation of these areas. It may be also added that their relations have generally large areas in the village under *rai-yati* tenures. I submit therefore that the proprietary tenure-holders should have no difficulty in meeting their engagements from the very commencement of this settlement.

I may add in conclusion that the incomes now left to the proprietor at the end of the present operations (i.e., in 1305 or 1898) are 186 per cent., in Cuttack, 111 per cent., in Puri, and 250 per cent., in Balasore higher than they were at the conclusion of the settlement of 1837. In 1315 (1908), when the *razādi* periods shall have expired, the proprietors' incomes will still be 134 per cent., 79 per cent., and 167 per cent., higher than in 1845, without taking

into account any increase by enhancement of rents of non-occupancy raiyats or by assessment of new cultivation which may be added to their profits in the meanwhile.

560. After perusal of the figures in the preceding paragraphs, it will not seem surprising that there is little to say on the subject of objections and recusancy. There was some hesitation at first on the part of proprietors to engage for revenue, but this was mainly due to two causes—(1) A mistrust of the terms of the *kabuliyat*: (2) The thought that some of their fellow-zamindars would not have to pay the new demand till 1306 (1899), whereas they had to pay it for 1305 (1898).

The orders of the Secretary of State* to take as revenue 50 to 55 per cent. of the assets, and to fix 30 years as the term of settlement came as a most grateful surprise to the zamindars, and beyond the natural reluctance to make payments in excess of old revenue which had been in force for 60 years, only few genuine objections remained.

I divide the objections to assessment of revenue into four heads—

- (i) Objections to the form of *kabuliyat*.
- (ii) Objections by some zamindars to pay in 1305 (A.D. 1898) i.e., before others.
- (iii) Other objections (chiefly by petition).
- (iv) Recusancy.

561 (i). On this subject some explanation is necessary.

The form of *kabuliyat*. In Appendix O, Survey and Settlement Manual, p. civ., a form of *kabuliyat* for temporarily settled areas is given. After various amendments, this *kabuliyat* † has been sanctioned by the Board and Government. The main points which came under discussion were—Abatements of revenue for calamities of the season; collections in accordance with the record of rights; the construction, maintenance, and abandonment of embankments during the currency of the settlement; the preservation of grazing grounds; rights in minerals; provisions for returns to the *patwari* or to the Land Records' Maintenance Department; provision for the survey and preparation of a record of rights at or near the time of expiry of the settlement (in preparation for the next).

At the last settlement, the zamindars executed a *kabuliyat* without any conditions. They merely engaged to pay so much revenue in a paper in which sometimes two instalments were recorded. It was not therefore unnatural, on being asked to sign a formidable *kabuliyat* of 11 or 12 clauses containing duties, pains, and penalties, that they showed some hesitation. I take no small blame to myself for not having published abroad the form of *kabuliyat*, but the mistake was remedied, I sincerely believe, by the careful manner in which objections were subsequently listened to and decided by the higher authorities.

In connection with the correspondence on the subject of the form of *kabuliyat*, Board's paragraph 4 of No. 330A of 26th July 1897 to Director of Land Records and Agriculture, Board's No. 1057 A of 22nd September 1897, and Government order No. 3403 of 17th August 1897‡ may be read. The important points are that the right of Government to construct embankments was not reserved, but only its right to maintain or abandon them. Government also reserved the right to all minerals except laterite and limestone, as well as facilities for working and carrying away such minerals. This right was reserved in accordance with the orders of the Government of India.

The Landholders' Association of Orissa raised objections to any interference with the rights of landlords in mines. They based their objection on the fact that deeds of sale of estates in the Province convey '*Pota*', '*nota*', '*nidhi*', '*nikhaf*', and that minerals are included in '*nikhaf*'. I have been unable to obtain a translation of this phrase but '*pota*' means 'buried' and '*nidhi*' means treasure.

They objected to the abandonment of embankments, and that too without provision for remission of revenue. The procedure under which the Collector was authorised to take the estate under *khas* management was also objected to as "unnecessary" in view of the existing provisions of law.

* Despatch No. 20 of the 3rd February 1898 from the Secretary of State for India printed as Appendix A No. 17.

† See Appendix A (21).

‡ See Appendix A (20-21).

The above objections were not put forward till March 1898. They were sent to me for submission to the higher authorities, with a request that I would postpone execution of *kabuliyats* till orders were passed. It was impossible to make any postponement, as the latest day of payment was 28th April 1898, but the Association was satisfied with my reply:—

I am unable to postpone execution, but feel sure that Government will, under the terms of clause 9, if any terms of the *kabuliyat* are altered or modified, allow zamindars to execute new *kabuliyats*.

In my No. 764 of 26th March 1898, I submitted the memorial to the Director. He forwarded it to the Board with his No. 825S of 20th April 1898. The Board returned the memorial (No. 761A of 11th May 1898), and desired that the Government orders should be explained to the memorialists. The Commissioner, however, again addressed the Board (his No. 179O.S., of 26th July 1898) on the subject. In the meantime several memorials from zamindars had reached Government, and after some further correspondence the telegram of 22nd October, followed by Government order of 26th October 1898, set the objections finally at rest. The telegram runs as follows:—

The Lieutenant-Governor has considered the four memorials presented to him by the Orissa Landholders' Association and other bodies. He is unable to alter the *kabuliyat* as issued for signature in any one of the items, but the memorialists may be assured that there is no intention on the part of Government to depart from any of the measures of consideration which have been usual on any occasion of agricultural injury.

The Government orders (No. 873T.—R. of 26th October 1898) explained matters in detail to the zamindars, and I have never heard of a single objection since. These orders conclude with an assurance to the zamindars that:—

It is not the intention of Government to regulate its dealings with any harsh or arbitrary principles differing from those that have governed its policy in the past, or to refuse to them such reasonable treatment as law and equity may demand, or even the special considerations for which occasion may from time to time arise and which Government has always shown.

562. The above objections were not of course directed against the

(ii) Objections of some zamindars to pay before others. amount of the newly assessed *jama*, nor had the objection to paying for 1305 1898 when other zamindars were only to pay for 1306 anything to

do with the new *jama* except in so far that it was an objection to pay more than the old revenue for a particular year. When it is remembered that during the last settlement proceedings under Regulation VII of 1822 ran on from 1831 to 1845, and that the assessments came into force from 1837 on the dates on which they were confirmed, it is not so surprising that in the present proceedings the revenues of all the estates, now swollen in number to nearly 6,400, could not be brought in at the same time. Including Khurda, rents had first to be judicially settled for 17 lakhs of tenants; then the assets of the estates had to be compiled, reports to be written, notices to be issued, objections to be put in and disposed of, and finally revenue proposals had to be made to the higher authority.

In order to reduce the loss to Government as much as possible, my power to take *kabuliyats* under clause 9 of the conditions was invariably exercised, orders of higher authority being afterwards given effect to. This procedure gave some extra trouble and may still cause trouble to the Collectors, but it has saved Government very serious financial loss.

I estimate that by not bringing in the revenue of all the temporarily settled estates in the Province for 1305 (1890), the loss was as follows:—

			Rs.
Outtark	...	...	1,23,000
Puri	...	...	32,000
Balasore	...	...	1,09,000
Total	...	...	2,64,000

The above sum is calculated from the totals of the differences between the old and new revenue for estates not assessed with revenue payable from the beginning of 1305 (having "latest day of payment" 28th April 1898).

Nothing more need be said about the objection by zamindars to pay new revenue when others were still paying the old than that it is a perfectly natural objection. We did not find out that it was impossible to get all the new revenue in at once in time to select for first assessment the zamindars who had given us trouble or who were suspected of collusion. In fact, progress in this work was purely geographical, and the arrangement was made entirely in the interests of economy and progress; so far then as zamindars were concerned, some were fortunate others were not.

563. Petitions of objection to the amount of assessment made by zamindars were generally of a very stereotyped nature.

(iii) Other objections.

The petition would make the estate out to be specially liable to flood or drought, and sometimes to both. If there was a *hât*, in the estate, objection would be taken to its assessment; a paragraph or two would follow on the impossibility of getting any further profits out of the estate because there was no more culturable waste; then the Tenancy Act granting occupancy rights to *pâhi* raiyats would be held out as a grievance. The petition would probably conclude by objection to the valuation of *nijchâs* and a prayer for allowances at 60 per cent.

The special reports for each estate and the block or covering report generally contained all the information necessary to answer the above objections. Very special consideration had been paid to the questions of flood and drought by officers thoroughly well acquainted with the local conditions. Such disabilities were therefore always set forth in detail and due allowances were made.

As regards *hâts*, some of the earliest assessments were startling, but after the orders of Government were received to fix only a ground rent on the site, these assessments were all reduced. The question of loss of future profits by the lack of culturable area could not well be taken into consideration, because the assessment was based on present assets. As for the Tenancy Act, the zamindars appeared to shut their eyes to the rights of occupancy given by Act X of 1859. As regards *nijchâs*, the zamindars expected some favourable valuation because such lands were generally valued favourably at the last settlement. Government and the Board deliberately refused to countenance any under-valuation which would obscure the assets. Ultimately a fair letting value for the *nijchâs* lands was calculated, allowances being made for any specially poor lands. The desire of the zamindars to get lands recorded in their own names for the purposes of a low valuation led them in many cases to oust, and try to oust, raiyats, and I hope that the action of Government and the Board in discountenancing under-valuations may serve to protect the raiyats at a future settlement.

I have discussed the stereotyped objections; it is impossible to set forth instances of genuine grievances. They referred, as a rule, to mistakes made by the Department regarding areas and assets, and even to mistakes in the Collectorate registers. As a rule, these objections were made at the last minute, and even afterwards. In some cases of hardship I have been able to revise *kabuliyats*, but there are not a few cases which ought to have come up at the demarcation and survey stage six to ten years ago.

564. There are at present only six recusant estates on the files though the zamindars of about thirty estates have shown a disinclination to engage. In all cases the assessments have been re-enquired into; in some ten cases certain reductions of valuations have been made and other grievances have been redressed, and the proprietors have engaged. In all the other cases (except six) zamindars have come forward to engage as soon as they heard the *chakla kanungo* had come into the estate to make collections under *khâs* management.

(iv) Recusancy.

There remain six estates; three in Cuttack, the total new *sadar jamas* of which amount to Rs. 23; two in Balasore, one with a revenue of Rs. 2,603 and the other of one anna, and one in Puri, the large estate of Kotdes. The principal recusant estate in Balasore is Mahâl Nankar, in Pargana Bhograi, with an existing revenue of only Rs. 969, and the objection is not only to the new revenue, which is taken at only 40 per cent., but to any re-assessment at all, the proprietors having put forward a claim to permanent settlement, which is still undecided.

As for Cuttack, the proprietors of *tauzi* No. 3977 have simply refused to appear, in spite of repeated notices. The revenue, though taken at only 50 per cent., has been more than trebled in this settlement, being raised from Rs. 5-5 to Rs. 17. This estate has been formally reported as recusant, and *malikana* has been proposed at four annas and three pies yearly.

Estate No. 435 is liable to loss of crops by flood, but the lands were valued at only Rs. 2-5-6 per acre. The proprietor refused either to engage or to state for what sum he would engage.* An annual *malikana* of 11 annas 4 pies has been recommended, the proposed new revenue being Rs. 4-6. In *tauzi* No. 2602, the proposed revenue is only Re. 1-14, and the proprietors have not appeared.

All these estates are so petty that it has been proposed that the Collector shall manage them through his *kauungos*.

I have already alluded to the recusant estate of Kotdes. The objection of the zamindars is not so much to the new *jama* as to each other. They are new purchasers, the representatives of a Puri *math*, a Mahajan family, and the Chaudhari family of Bhinjarpur. They are all creditors of the old zamindars, and their shares of the estate are not sufficient security for their claims. It is clear that they cannot all manage the property, and no one will give way. In the meantime it is advantageous for them to let Government take the management, as, though the *malikana* allowance is very small (only 5 per cent., of the old *jama* or some Rs. 4,000) Government management and good records will enormously enhance the value of the estate. There are a very large number of proprietary tenures in the estate and the tenure-holders had been allowed to pay or not almost as they wished. Probably the summary methods of the certificate procedure will inculcate a more punctual habit of payment, and the estate (a very compact one and favourably situated) will become by far the most valuable in the Province (Khurda excepted).

The rules for dealing with recusant proprietors are printed with the rules for settlement of rents and revenues in the same Appendix.† These rules were confirmed by the Board in their No. 367A. of 1st September 1899 and have been carried out in the six estates finally declared as recusant. The rules were also followed in the other estates "disinclined to engage," but as soon as the proprietors agreed and paid up all arrears, they executed *kabulyats* and their papers were made over to them.

565. In this connection Mr. Macneill's Memorandum on the Land Revenue Administration of the Lower Provinces, and Mr. Carey's Note in Appendix P. A. may be referred to. We had considerable difficulty in ascertaining the date of expiry of the settlement and the date on which the new revenue should be brought into force. This difficulty led us into making certain forecasts of increase of revenue which never were, or could have been, realised. Rents in Orissa are collected according to the local year‡ and revenue is collected accordingly. Thus in the previous settlement revenue was fixed till the end of 1304 (August 1897); the last instalments of revenue for that year having as their latest date of payment the 8th November 1897.

For the new settlement, therefore, revenue is fixed till the end of 1304 (August 1927). The rents are fixed for fifteen or five years according to section 113, Bengal Tenancy Act, except those of *thani raiyats*, *bazgaftdars*, holders of *kharula jamabandi* and of resumed *jagirs*, whose rents are fixed till the end of 1334 (August 1927.) On the *Sania* day of 1335 in September 1927, all rents are liable to be raised and new revenue may be demanded for 1335 and onward. The *Sania* day will probably fall in September of 1927; on the day before this the present settlement may be said to expire, and if the present arrangements continue, the new revenue of 1335 will be payable on and after 28th April 1928. It is important for our successors to note these dates, so as to avoid the errors into which we fell.

On the subject of rent *kists* there is little to say. Inquiries into the *puttan* of the last settlement showed in some cases no *kist*, in some cases four, and in some cases nine. These *kists* were, however, never observed. Rents are collected for the most part with special care as the 28th April and 8th November

* The proprietor of this estate has executed the *kabulyat* since the above was written.

† Appendix C.

‡ Appendix OA gives an account of the *Amh* and *Wahuts* eras.

(the latest days of payment of revenue) draw near. The Tenancy Act now provides for *kists* of rent, and it was considered unnecessary to make any further provision in the raiyats' *khatians* or *kabuliyats*.*

There has been a great deal of enquiry and correspondence on the subject, not so much of *kists* of revenue, but of the latest dates of payment and the proportions of revenue payable at each date. Final orders have not yet been issued, but I understand that it is intended to make all estates with revenue of less than Rs. 10 pay the full demand on 28th April, and to make all other estates pay twelve annas of the demand on 28th April and four annas of the demand on 8th November.

I venture to submit my final opinion on the subject as follows: That ten annas on 28th April and six annas on 8th December would, if Collectorate offices could stand the strain of two dates within three-and-a-half months of each other, be much better dates and proportions for raiyats generally, and would make collections more easy for the zamindars. By 8th December the crop is either cut, or established, or lost, whereas by 8th November there is uncertainty and credit is often hard to get.

There is one point to which attention should be drawn. When orders are finally passed, fresh *kabuliyats* must be executed. Care should be taken to insert the proper month in the column "month in which *kist* falls due," so as to keep in line with section 2, Act XI of 1859. For instalments payable on 28th April, "March" should be entered as "the month in which *kist* falls due." Thus under section 2 the instalment becomes "an arrear of revenue" on 1st April, and "latest day of payment" of that arrear is 28th April.

For sums payable on 8th December, I would suggest August rather than October for the "month in which *kist* falls due," because August (I believe) always falls in the Uriya year for which the payments are due, and October falls in the next Uriya year. The instalment would then be an arrear of revenue on the 1st September, and have its latest date of payment on 8th December. I have purposely avoided a discussion of the nine *kists* or the seven *kists* and the proportion payable by estates with revenue of more than Rs. 10 and less than Rs. 50, and more than Rs. 50 and less than Rs. 100. The matter has been threshed out at very great length, and is now before Government, and an exposure of the many mistakes which we have made and the anomalies in the Collectors' offices appears to be uncalled for.

* See also paragraph 344

Part VI.

CHAPTER XXIII.

REVENUE-FREE LANDS.

566. Throughout India it was the practice of the Hindu rulers to assign lands to Brahmans for their support, and to endow monasteries and charitable institutions in perpetuity, and Orissa with its large Brahman population and containing the holy cities of Puri, Bhubaneswar, and Jajpur, was no exception to the rule.

These grants and endowments were wholly or partially exempted from the payment of revenue, and so strong was the religious feeling of the country that neither Mahomedan bigotry nor Mahratta greed prevailed to set aside the gifts and make these lands liable to contribute to the public treasury.

567. Lands thus exempted from the payment of the public revenue and styled *lakharaj*, meaning 'without revenue.' On their acquisition of the Province in 1803 the British

Lakharaj land—its original.

found a very large portion of the cultivated land held under various revenue-free grants, and as a preliminary to an enquiry into the validity of their titles, all claimants to hold land revenue-free were required to register their claims and deposit their *sanads*, or deeds of grant, in the central office at Cuttack. For five years this office was kept open, and in that time upwards of 128,000 claims were registered. In 1815 the registry was re-opened, this time with branch offices at Balasore and Puri, and another 30,000 *sanads* were filed. In 1837 began the work of enquiry under Regulations XII of 1805 and II of 1819, and in 1841 the final rules were issued, and are here reproduced:

RULE I.—Officers charged with prosecuting claims against *lakharaj* tenures shall not prefer or maintain any suit for lands not exceeding ten bighas, which have been held exempt from the payment of revenue or rent without interruption since the 1st December 1790. Provided that in the districts of Chittagong, Sylhet, and Cuttack this indulgence shall not extend to such lands except where the produce is *hant fide* appropriated as an endowment for temples or for other religious or charitable purposes, and that in Cuttack the proof of rent-free possession without interruption shall not be required in the cases so excepted beyond the 14th October 1803, the date fixed by Clause 7, Section 18, Regulation XII, 1805.

RULE II.—In all cases where the Sadar Board of Revenue, to whom general reports shall be made in the forms which the Board may prescribe, of claims relinquished under the preceding rule, shall pass orders for the confirmation of such relinquishment, the orders shall be final, and a certificate, in the form to be determined by the Board, shall be granted to the holder of the lands, confirmatory of this title, to secure him from all future claims on the part of the resumption officers on account of the lands in question.

RULE V.—Whenever any land has been held *lakharaj* since the 12th August 1765, and the question shall arise whether, having been so held, the tenure was originally hereditary, if it be proved, or be ascertained in the course of the investigation, that one or more successions took place before the said date, such succession or successions shall be admitted by the Government Prosecutor or Agent as conclusive against the claim of Government to deal with the tenure as a grant for life liable to resumption upon decease of the incumbent of 1765, and if there be not proof of an actual succession by inheritance before the 12th August 1765, still, if from the circumstances of the case there be strong ground of presumption in favour of hereditary possession anterior to that date, the Government officers shall abandon the further prosecution of the claim by lapse, and shall not require proof to the specific conditions of the original grant in the manner prescribed by a strict interpretation of the existing law.

RULE VII.—Persons in possession of *lakharaj* lands in Cuttack, from the date of the acquisition of the Province consecutively to the present date, shall be allowed to retain possession during their natural lives, and in the prosecution of any claim to try the validity of the grant or title by which lands may have been so held, the demand on the part of Government shall be for an award of resumption, to take effect upon the decease of the incumbent.

RULE VIII.—Whenever decree of resumption may be passed against a *talukdar* who consecutively held the lands and enjoyed the produce without demand of revenue for thirty

years from the date of decree, the case shall be reported through the revenue authorities to the Government, but the settlement of the lands under the decree shall not be delayed because of such reference.

RULE XIII.—Whenever settlement shall be made with the holder of any resumed *lakhiraj* tenure for the dues of Government thereupon, the *jama* demanded from the said holder shall be at a rate not exceeding one-half of the gross rental of the land resumed, and if the late *lakhirajdar* have held the whole or any part of the land in *my* cultivation, then for such land at the rate of one-half of the estimated rent value. This boon is to extend retrospectively to all resumed lands settled since the promulgation of Regulation IX, 1825 (the date on which the settlement principles of Regulation VII, 1822, for the Western Provinces were first introduced into Bengal), with the exception of *lakhiraj* resumptions, which, after final settlement, have been transferred to new hands by public or private sale, at prices corresponding, it is to be presumed, with the *jama* assessed upon them at the time of purchase. In cases, however, where the purchase has been made by Government, the estate will be restored to the proprietors at a *jama* not exceeding one-half of the gross rental, subject to all obligations and encumbrances which may subsequently to the purchase have supervened upon it.

In his Minute of the 23rd January 1847, Mr. Commissioner Mills gives the following account of the proceedings:—

In the early settlements the enquiry into the liability of rent-free lands to assessment has been postponed to a future period; but it having been satisfactorily demonstrated that the *lakhiraj* land indirectly contributed to the payment of the admitted high assessment of the *thani* lands, inasmuch as the *thani* raiyats held *lakhiraj* lands at extremely low rates, from the profits of which they paid their high *khudasa* rates, it was judiciously resolved that the detailed settlement should be simultaneously conducted with an enquiry into all such claims; experience further suggested the wisdom of uniting the duty of settlement and resumption in an estate in the same officer.

The rent-free claims were numerous beyond belief; it would, however, exceed the limits of a memorandum such as the present were an attempt made to detail the measures adopted for the purpose of carrying on the operations in a manner least obnoxious to the feelings of the people, and securing a calm and deliberate enquiry into the rights and interests of the parties concerned. It may be sufficient to say that the rent-free claims in the three districts numbered 2,77,925; that no stamp duties or fees were charged; that *kharela ma'afi* claims which were first considered as invalid alienations, were subsequently dealt with as ordinary rent-free tenures, and retrospective effect was given to these orders; that *darveller* and other tenures, the proceeds of which were found devoted to religious or charitable purposes, were considered to be *per se* perpetual, and not liable to assessment because the grants themselves contained no heritable provisions; that erroneous and illegal resumptions were rectified by the Collectors; that the rules of the 17th of April 1840, in so far as they were applicable to Cuttack, were both prospectively and retrospectively carried out; that the settling officers were authorised to relinquish small portions of land not exceeding a few *bighas* in each village for the *gram detahs* or village idols; in short, I may confidently state that it has been the earnest desire of the authorities to carry out these unpalatable enquiries in a spirit of extreme moderation and forbearance, with an earnest desire to uphold the rights of all, and I believe all did their duty with a tender and even hand, and in a manner satisfactory to all parties.

Nature of grants confirmed 568. As the result of these enquiries the right to hold the land free of revenue was recognised in the following instances:—

- (1) Lands assigned revenue-free under grants from the Mahratta Raja of Berar, or from any zamindar *talukdar* or actual proprietor of land, as endowments of the temple of Juganath, or of *maths* in the vicinity of the temple, or for similar purposes.
- (2) All grants for holding land exempt from payment of revenue, made previous to October 1791, by whatever authority, and whether by a writing or without a writing, provided that the grantee actually and *bonâ fide* obtained possession of the land so granted, and held it exempt from the payment of revenue previously to the date above-mentioned, and that the land was not subsequently rendered subject to the payment of revenue by proper officers or orders of Government.
- (3) All grants for holding land exempt from the payment of revenue, made subsequently to October 1791 and prior to October 1803, by whatever authority, which has been confirmed or expressly admitted antecedently to the latter date, provided that by the authority of the existing Government the grantee actually and *bonâ fide* obtained possession of the

- land so granted, and held the same exempt from the payment of revenue previously to October 1803, and that the land had not been afterwards rendered subject to the payment of revenue by the officers or orders of Government.
- (4) Small quantities of land, not exceeding 10 *bighas*, held exempt from the payment of revenue under grant made prior to October 1803, and *boni fide* appropriated as endowments for temples or for other religious or charitable purposes, or the proceeds of which were enjoyed by individuals, whether Mahomedan or Hindu, being priests or religious advisers of the great body of cultivators.
 - (5) Royal (*Bādshāhi*) grants made previous to October 1803, provided that the grantees actually and *boni fide* obtained possession of the lands so granted previous to that date, and that the grant had not been subsequently resumed by the proper officers or orders of Government.
 - (6) All grants made or confirmed by the British Government subsequently to October 1803, and grants held under invalid titles which the Governor-General in Council thought fit not to resume.
 - (7) Small plots of ground for village idols.

The lands so confirmed are generally known as *lakhiraj bahāl* or 'confirmed without revenue,' or more shortly *bahāl* as opposed to the resumed or *bazyafti* land. Land confirmed without revenue for the term of the incumbent's natural life under Rule VII of the rules quoted in the last paragraph are known as *hmikhiyati lakhiraj*.

569. The revenue-free lands in the first instance are divided according as they are the absolute property of individuals or assigned in trust for a charitable or religious purpose. Of the first class are—

- (1) *Brahmottar*, or lands originally assigned for the support of Brahmans. There are now about 87,000 acres recorded under this head, but many of the holdings have passed into the hands of *Karans* and cultivators.
- (2) *Khairāt*.—The name implies a benefice and was used of grants to mendicants and other poor Hindus, sometimes also of grants for charitable purposes. The area now recorded is about 31,000 acres.
- (3) *Datta* means a gift, and is used of grants to persons other than Brahmans, especially for services.
- (4) *Khushbās*, literally "comfortable dwelling," was used of grants to Brahmans and other better class Hindu cultivators for their houses.
- (5) *Mahottarān*, or "deliverance," is a name given to small grants to Hindus other than Brahmans: very common in Balasore.
- (6) *Dabir Joi* (vulg. *Dabijji*) is the dower given by the father on the occasion of a daughter's marriage.
- (7) *Anna*.—Royal grants to Mahomedans.
- (8) *Madul Mash* are grants to learned Mahomedans for their help or maintenance.
- (9) *Ma'aji kharida*.—Land bought for a consideration from a *zamin-dar* or *talukdār* free of assessment.

Of all these it may be said that the land is the absolute property of the grantee. He can sell or give away the whole or any part of it and grant mortgages and perpetual leases. He pays rent to no one, and only renders to Government taxes and cesses according to the value of his property.

Lands of the second class are—

- (1) *Debottar* or "bestowed on the gods," by which term are known all lands assigned for a religious purpose. Of these there are recorded in the Settlement papers holdings with an area of about 196,000 acres.

- (2) *Sadabratī*, or "pious endowments," is the generic name for all charitable endowments. They appear to be generally recorded as *Khairat* or *Debottar*.
- (3) *Amrita Manohi* lands are really a subdivision of *Debottar*, being generally charitable endowments for the support of the Puri temple. Under this head an area of 54,000 acres has been recorded.
- (4) *Pirottar* are lands assigned for the support of shrines of Mahomedan *Pirs*, or saints. Of these we have recorded 11,600 acres.
- (5) *Qadam Rasul* are also Mahomedan endowments of shrines at which the prophet is believed to have set his foot.

These are all of the nature of trusts; the land becoming the absolute property of temple, idol, monastery, or saint, while the management is vested in a trustee who is variously called the *shibast* or minister, *mārjatlār* (agent), *mohant* (abbot of a monastery,) or in the case of a Mahomedan shrine the *martwālī* or *daroga*.

Some of these grants were only religious or charitable in name, the object of the assignment being to create an entail, as trust properties are impartible and inalienable under both Hindu and Mahomedan law.

In such cases the grantor usually made himself and his heirs-at-law the hereditary trustees (*mārjatlār*) and the property became practically an entailed estate. The large majority of the endowments were, however, in their inception for charitable purposes, especially those of the monasteries that lie along the pilgrim route, and nearly all have attached to them both *Sadabratī* and *debottar* lands. Perhaps there was a time when the proceeds of these endowments were indeed devoted to the purposes for which they were intended, and when monk and abbot led self-denying and moral lives, but it is certain that, long before the British had any connection with Orissa, the monasteries had acquired an unenviable notoriety for riotous living, and that only a small part of their income found its way into the pockets of the poor.

570. The British Government endeavoured to remedy the abuses of the system by constituting the Board of Revenue into a Court of Chancery under Regulation XIX of 1810 for the supervision of the endowments in the Province. To each district one or more local agents, one being the Collector, were appointed to make recommendations and suggestions for the proper management of these institutions and to carry out the Board's orders, while any individual who thought himself aggrieved had a right to bring a suit before the Civil Courts to have the order set aside.

These provisions had some salutary results, but were not so efficacious as they might have been.

Owing to the objections of certain religious bodies this regulation was subsequently repealed by Act XX of 1863, which freed both religious and charitable endowments from Government supervision, substituting for certain classes only the control of a committee of management. These committees have no doubt done their best, but they have been hampered by the want of any accurate definition of their powers and they have only been appointed for a few large endowments, such as the Bhubaneswar Temple and the *Qadam Rasul*. The committee of native gentlemen* who in 1869 reported on the administration of charitable endowments in Orissa advised the appointment of a central committee with stronger powers to supervise all local committees and endowments throughout each district: but their suggestions were not accepted, the abuses have been allowed to go on, and at the present day we have found many instances in which lands have been illegally alienated in whole or part, or the proceeds misapplied. The deeds of sale (*samarpan-patra*) by which such lands are alienated do not indeed profess to transfer the land itself, but only the trusteeship, and recite the fact that the assignor being unable to perform properly the service of the idol has alienated the land for the benefit of his trust, or for the discharge of a debt incurred on account of

* See Report of 26th March 1869 on Orissa Endowment.

it, and not infrequently the purchaser binds himself to perform part or the whole of the service, or worship (*sheba*). The practical effect is, however, to permanently divert the land from the purpose for which it was assigned, and in some few cases *debottar* lands have actually passed into the hands of Mahomedans. It is not, however, always the case that sales are thus qualified, and Mr. Kingsford instances in his report the case of village Barak in Paigana Bayang, which for the debts of the *shebait* was sold under a Civil Court decree without any mention of the *sheba*, the purchaser being a nephew of the Government Pleader of Cuttack.

Debottar lands are also mortgaged*, nominally of course in the idol's interest, and the *shebait* Bhabananda Deb Goswami of Balasore is said to have thus parted with most of the lands of his endowment. A more effective and commoner means for alienating trust lands than either sale or mortgage is to grant a permanent lease *istimdari patta* taking a large premium and reserving but a very small rent, sometimes only a small contribution to the expenses of the shrine. These abuses are of course most common in small grants, where there is no committee of management. The only check on them is the power of the zamindar, for the permission given by Act XX of 1863 to any member of the public to sue the misappropriator of funds remains a dead letter. We commonly find that besides the *morjadar* of the grant, there is also a superintendent†, generally the zamindar, who does not himself interfere in the management except to insist on the proper performance of the conditions; and even where this is not the case zamindars consider themselves to have a right to dispossess a *shebait* who does not do his duty and to appoint another in his place.

Mr. Nathan gives an instance where a village *muqaddam* turned out a *shebait* and appointed a better man to a shrine in his village, and I consider that some statutory recognition of this right would have a salutary effect. A precedent is not wanting, for in Khurda the resumption proceedings secure the right to Government as zamindar.

That there would be no native objection to Government supervision on religious grounds is made clear, not only by the report of the Committee quoted above, but by the fact that one of the present guardians of the Puri temple endowment is a Christian, and that the practical administration of the temple is in the hands of an English manager.

571. In the case of trusts created only so as to form an entail, the succession follows usually the ordinary Hindu law of inheritance, and the trustees continue ever to increase in number. *Shebait*s and *mohants* are, in name at least, celibates, and are succeeded by one of their disciples *Chela*, either nominated by them or selected by the heads of the neighbouring endowments: in some monasteries there is a custom that the head monk or *athakiri* succeeds.

572. The most important of the revenue-free properties are the *jagir mahals* of Malud and the revenue-free estates of Patia, and the lands of the great temple of Jagannath. These latter include the *ekhrājāts*, a portion of the Khurda estate 105 square miles in extent made over to the Temple in lieu of the support formerly given by the Government, and the *adāts hazari* or lands forming the immediate endowment of the Temple with a nominal rent roll of Rs. 27,000. With the exception of the *Ekhrājāt* estates and of the *jagir mahals* of Malud in the Puri District and of Patia in Cuttack, all the revenue-free estates were held to be covered by the general notifications for the survey and settlement of the Province, and a draft record-of-rights was prepared in them under the rule laid down by Sir Charles Elliot for survey of permanently-settled lands mixed up with temporarily-settled estates‡.

573. Owing, however, to the more pressing necessity of completing the work in the temporarily-settled lands the attestation of wholly revenue-free villages was left to the last, and in 1898 Mr. H. McPherson, Assistant Settlement Officer in charge of the Puri District, submitted proposals for stopping

* *Bhaṣbandhak* or *Phalbandhak* mortgage is the common form.

† *Karjyadhakya* or *Parikha*.

‡ See inspection note of 15th October 1891.

all further proceedings in respect of the revenue-free lands in 167 villages containing in all 125,000 plots. This proposal was, however, rejected by Government,* and the re-attestation and completion of the records was taken up by Babu Sudarsan Das, Sub-Deputy Collector, in the season of 1898-99 and finished by May 1899.

574. Notification No. 4454L. R., dated 20th December 1892, prescribing survey and preparation of a record-of-rights in the several Parganas of Cuttack was by a subsequent notification, dated the 13th September 1894, cancelled, except for such villages as contained temporarily-settled lands or lands irrigated by canal water.

Accordingly, at the time of attestation and settlement of rents, several wholly revenue-free villages were omitted, and in 1898 a proposal was made to exclude from survey and settlement revenue-free villages in certain other Parganas.

It was then pointed out that it was not the intention of Government to exclude from settlement isolated revenue-free villages, and they have since been attested, except *killa Patia*, in which the settlement proceedings were stopped under Government order No. 1408 of 8th April 1899.

575. With the exception of the *hinihaiyati lakhiraj* mentioned in paragraph 568, all lands confirmed as revenue-free at the last settlement were protected in perpetuity from assessment, and there was no means by which any more revenue-free land than what then existed could be created. The duties of the Settlement Department were accordingly limited to the identification of the lands now claimed as *lakhiraj* within one or other of the confirmed grants recorded in the papers of the last settlement, and to recording the amount of land, if any, held without title.

For this purpose a comparison of the past and present areas of all revenue-free lands was made in a form containing the following details:—

A. Entries in the last settlement papers—

- (1) Nature of grant.
- (2) Name of *lakhirajdar* and number of grant.
- (3) Area confirmed.

B. According to the Collector's General Register of revenue-free lands—

- (1) Number in the Register (for this in Cuttack the number in the *special register* was commonly substituted).
- (2) Name of estate.
- (3) Name of *lakhirajdar*.
- (4) Area.

C. As entered in the present settlement papers—

- (1) Name of claimant.
- (2) Right how obtained.
- (3) *Khasra* numbers and their totals.
- (4) Particulars of disputes if any.
- (5) Area.
- (6) Increase.
- (7) Decrease.
- (8) Explanation of increase or decrease.

When a claim to hold land revenue-free was made and no relationship of landlord and tenant was found to exist between the zamindar and the claimant in respect of such land, the attesting officer was bound to enter the land as revenue-free, but would, in the proper column of the *lakhiraj* statements, leave instructions to the assessing officer for the assessment of such land. Very often too when a *lakhirajdar* had encroached a little on the lands of a revenue-paying estate he would sign the statement in token of his acquiescence in the assessment of certain particular fields.

* Government Order No. 474 T.—R. dated 30th June 1898.

Mr. Nathan's proposal for resumption. 576. In his report on Kotdes, paragraphs 24 to 39, Mr. Nathan submitted definite proposals for the resumption of lands claimed as revenue free on two grounds:—

- (1) That the *lakhirdars* was occupying land in excess of the amount that he was entitled to hold revenue-free under the terms of his grant;
- (2) That the proceeds of the lands were no longer devoted to the purpose for which the grant was originally made.

For cases coming within the first class, Mr. Nathan and the Director proposed—

- (i) That an allowance of 10 per cent. on the former area should be made for differences in measurement.
- (ii) That no resumption should be made unless the total area to be resumed in respect of the grant was more than a tenth of an acre.
- (iii) That the worst lands should generally be resumed.
- (iv) That whole *khars* fields should be resumed.

The second case was where *deotiar*, *asit manas*, and other lands assigned for the support of a particular idol or temple or for charity had been unlawfully alienated, by the trustee or the proceeds diverted from the purposes for which they were intended. Government, in their letter No. 2604 of the 10th May 1894, decided that the Settlement Officer should not resume any grants on the ground that the proceeds of the land were not devoted to the legitimate object of the grant, and that any interference with charitable or religious endowments must be made separately; and since then no attempt has been made, except in the permanently-settled estate of Madhapur, to exercise any check over the appropriation of the proceeds of trust lands.

577. As to the treatment of lands held by *lakhirdars* in excess of that to which they were entitled, the Director in his letter No. 3938, dated the 8th February 1895, recommended that the Settlement Officer should be authorised to ignore, i.e., to leave with the *bahaldar*, unassessed, excess areas not exceeding 10 per cent. of the areas recorded at last settlement, when such excess should appear to be probably due to difference of the systems of measurement, and also to ignore any area still in excess after such allowance had been made unless it exceeded one *gunth* or .04 of an acre. Excess lands not allowed to remain revenue-free were to be treated as belonging to the adjoining revenue-paying Mahal and the *bahaldar* recorded as a settled raiyat. These proposals were sanctioned by Government* and were incorporated in the fair rent rules of 1896 with the additional proviso† that when the *bahaldar* had tenants under him whose status might reasonably be found to be that of raiyats, the *bahaldar* should be treated as a tenure-holder in order that the status of the actual cultivators should not be degraded.

A very large proportion of the *lakhirdars* accepted the terms offered, and agreed to be recorded as raiyats and pay rent. Much time was, however, wasted in getting their consent and in ascertaining the particular plots to be assessed, and in some few cases the *lakhirdars* absolutely refused to appear or come to terms.

Accordingly, in January 1897, it was proposed to get rid of a large percentage of these cases by raising the limit of area† that might be ignored to a quarter of an acre. Further figures were, however, called for by Government, and on receipt of them the following orders were passed:—

The present recommendation of the Director of Land Records, which is supported by the Board, is that if after the allowance of 10 per cent. there is still any surplus which is more than $\frac{1}{4}$ of an acre, but does not exceed $\frac{1}{2}$ of an acre, the balance of surplus land

* Government to Board of Revenue, No. 3938, dated 8th February 1895.

† Director of Land Records to Board of Revenue, No. 4738, dated 18th February 1896. Appendix C, Part I, Rule 18.

‡ Director of Land Records to Board of Revenue, No. 5123, dated 31st March 1897.

§ Settlement Officer to Government, No. 1294, dated 25th June 1897; Director Land Records to Board of Revenue, No. 6141, dated 10th October 1897; Government to Board of Revenue, No. 3619 L.R., dated 26th November 1897.

exceeding .04 of an acre shall only be assessed where there is available for assessment a whole field or *khasra* number, other than homestead, comprising an area not greater than that surplus. Having regard to the advisability of avoiding the breaking up of fields and survey plots, the Lieutenant-Governor allows the Settlement Officer discretion to forego the assessment in such cases if he finds, as the work of assessment proceeds, that they are not very numerous, and that the loss of revenue entitled by the concession would not be serious.

2. As regards the procedure to be followed in resuming excess lands, His Honour agrees with the Director in thinking that where the parties do not accept the terms offered, it will be safest to observe the procedure of the Resumption Laws, but it is hoped that the cases in which such proceedings will be necessary will be few. The Board say that having assessed the surplus lands, the Settlement Officers may leave the parties to go to the Civil Courts if they are dissatisfied. The assesses can no doubt have recourse to the Civil Courts if they wish, but the Lieutenant-Governor is of opinion that, if the formalities prescribed by the Resumption Laws are observed by Settlement Officers, there will probably be less anxiety on the part of assesses to contest their orders in the Civil Courts.

In accordance with these orders many of the resumption cases pending were struck off, and the rest were for the most part decided by compromise, or the lands assessed *ex parte* on the failure of the recorded *lakhirajdars* to appear in answer to the notices served.

578. Many cases, especially in Cuttack, escaped notice until the work

Resumed areas.

was in its last stage, and the information as to revenue-free lands was being reduced to the form of the register which has been handed over to the Collector. It was then found that a good many small plots of land were *de facto* held revenue-free and that their title to be so held had apparently been recognised by the attesting officers, but that either the land had been entered twice over against the same entry in the Collector's register or that subsequent orders of resumption had escaped notice. Where the area thus apparently liable to resumption was less than two acres the lands have been recorded as revenue-free, a note being made of the defect in title in a register made over to the Collector. In 49 cases where the area in dispute was over two acres a formal enquiry was held resulting in the resumption of sixteen parcels of land with an aggregate area of 222 acres, of which 100 acres were waste and the remainder has been assessed at Rs. 123, the lands being thus leniently assessed in consideration of their having been *de facto* held revenue-free, though on a defective title.

The most important was a resumption of 64 acres in Kendrapara town held by a well-to-do man who was himself both *mugaldam* of the village and zamindar of the estate in which the land lay. The only other important resumptions are those of Kankara Katak in the Puri District, a village which had since the last settlement been cultivated by the proprietor of a neighbouring *tanki* village and was resumed and assessed at Rs. 25; and that of 25 acres of land near Cuttack sold as waste by the District Board and in this settlement assessed at Rs. 37 and included in *tauzi* No. 2538 belonging to the *lakhirajdar*.

How much land has been surrendered by the *lakhirajdars* and included in the revenue-paying estates it is now impossible to say. At first a separate return was made of such assessments, but it was discontinued on receipt of a letter from Government* in which it was held that the term "resumption" cases did not apply to the assessment of the holdings in question; and from that time forward the land surrendered was added at once to the *lakhirajdar's* raiyati land, if any, and assessed as new cultivation. Up to April 1897, .0013 of the total area assessed consisted of these excess, or *taufir*, lands and the rent settled on it was .0017 of the total assets. Assuming these figures to have held true, the total *taufir* area assessed in the Province would be 2,728 acres and the rental about Rs. 6,500. Mr. Kingsford reports that in Balasore 3,260 pieces of land measuring 1,220 acres and assessed at about Rs. 2,000 were resumed. In all cases the *lakhirajdars* have been allowed to choose the lands they would surrender, so that most of the *taufir* is very inferior. Where the *lakhirajdar* is already a raiyat of the village, I have little doubt but that the rent assessed will be collected, and where he is also the zamindar it does not matter whether it is or is not collected; but in other cases where he is the *shahid* of a temple, or an influential man with no rent-paying lands in the village, our assessment is likely to remain a dead letter outside the few big and well managed zamindaris.

* Government order No. 80 T.—R., dated 1st May 1897.

579. Lands declared under Rule VII of the Resumption Rules of 1841

Hinikdiyati lakhiraj,

to be liable to resumption on the death of the incumbent are known in Orissa as *hinikhaiyati lakhiraj*.

No register of such lands was kept, and the Collectors were only able to give very incomplete information as to them.

It was ordered in the first assessment rules of 1896 that where the grantee was dead the grant should be treated as ordinary raiyati land and the assets included with the assets of the estate in which it was situated. Where the Collector had already brought such a grant on to his revenue-roll it was proposed if the land was less than 20 acres to cancel the *hasi* number and incorporate the land in the estate within which it lay.

In a few cases, however, the temporary nature of the grant escaped the notice of the Settlement Department, as it had done that of the Collector, and the fact not coming to light until all the records were complete, a note has been left for the Collector to take action on it if he thinks fit. The cases are all under two acres and few in number.

In Balasore only five cases in all were discovered. Two were resumed and made into separate estates, and three were sold by the Collector.

Special cases of revenue-free lands.

580. In the course of our enquiries some rather curious cases were brought to light, falling as a rule under one of three classes—

- (1) Confirmation as revenue-free of both superior and inferior tenures.
- (2) Treatment of confirmed revenue-free lands as rent-paying.
- (3) Treatment of resumed lands as revenue-free.

Very often where at first only a few lands held under specific grants were declared to be revenue-free, but by a subsequent order the whole village was confirmed as *lakhiraj*, the land was entered twice over in the register of revenue-free lands. Such has been the case in village Raibul Jaunpara in Asureswar, which stands in the Collector's register as endowed to Dadhibabhanji Thakur, whose representative is Annapurna Debya, while within the village certain plots are separately recorded in the names of other persons as subordinate *lakhirajdars**. So, too, the Bhubaneswar village is a revenue-free property endowed on the temple of that name, but some of the lands have been in turn assigned to the *shebais* of particular shrines and temples. A more complicated case is that of Sujampur, Pargana Baruan, where out of a total area of 304.41 acres, an area of 264.63 acres was confirmed as revenue-free, and 39.78 acres resumed in 1838. The village being revenue-free the *bazyafidars* paid rent directly to the Collector until 1844, when their lands were attached for arrears. On a reference being made to the Commissioner, he expressed his opinion that these subordinate tenures should not have been resumed, and the Collector accordingly released the lands from *khas* management and refunded to the holders all the rent collected up to date. The lands, however, still stood in the settlement papers as *bazyafiti* until 1897, when, in consultation with the Collector, they were declared to be revenue-free.

Again, in the Patamundai estate it was found that out of an original grant of 21.99 acres the Deputy Collector confirmed only 2 acres as revenue-free and assessed the rest. The Commissioner on appeal confirmed as revenue-free 5.37 acres which was entered as special No. 36,240, and on a second appeal to the Board the balance was confirmed as revenue-free also. The appellants, however, in apparent ignorance of the later orders, continued to pay their *bazyafiti* assessment. The matter coming to light in this Settlement they were exempted from enhancement of the quit rent now being paid.

On the other hand it was not uncommon to find claims to hold as revenue-free land which had actually been resumed. Most of these cases were brought to light by the comparison made and the lands were treated as *bazyafiti* and assessed.

Another case is that of Barambarda in Pargana Alti. The village, which had a total area of 611 acres, was claimed at the last settlement as revenue-free, but the Deputy Collector rejected the claim as invalid. He found, however, some 83 acres within the village to be held under valid revenue-free grants, and

* Commonly called "*Shikmi*" or "*Fulkar*" *lakhiraj*.

another 33 acres held free of rents he resumed and assessed: he also found 51 acres of *kharida jamabandi*. On appeal the Special Commissioner set aside the Deputy Collector's finding and confirmed the entire village as revenue-free. The 83 acres already confirmed was thus entered twice over; once under No. 28091 containing the whole village, and again under the several grants originally confirmed by the Deputy Collector.

The 83 acres continued until the present settlement to be held by the subordinate *lakhirajdars* in adverse possession to the proprietor of the village, while the *bazyafidars* and the holders of *kharida jamabandi* paid either no rent or that recorded in the settlement papers.

At the present settlement the proprietor of the village tried to have all these subordinate revenue-free and privileged holdings recorded as *pahi* and assessed to rent. His claim was rejected in the case of the revenue-free holders, but enhancements were allowed in the case of the *bazyafis* and *kharida jamabandi*. I doubt, on the analogy of Sujampur referred to above, whether this was right, but the tenants agreed to it.

In Puri there are one or two curious cases of lands confirmed as *tanki bahal* included in Register B as revenue-free estates.

Registers of revenue-free lands. 581. The settlement records contained details of revenue-free lands in three forms—

- (1) The *Khatian*; showing the revenue-free lands held in a village by each *lakhirajdar* or group of *lakhirajdars*.
- (2) The *Torij*; an index to the *khatians*.
- (3) The *lakhiraj* statements described in paragraph 575 *supra*, showing how the lands of each grant were now held.

In 1897, the question was raised as to how the Collector's registers were to be brought into accordance with the settlement papers, and in order to explain the difficulties, I propose to give a short account of the early system of registration and of the registers of revenue-free lands in the Collectorate.

582. In 1805, shortly after the conquest of the Province by the British, an office was opened at Cuttack for the registration of all claims to hold revenue-free. In the five years during which the office was kept open over 128,000 *sanads* were filed and registered, and when the office was re-opened in 1815 with branches at Balasore and Puri another 30,000 were presented. Up to 1836 no attempt had been made to sift these claims, and the register was arranged without regard to geographical order, so that it was difficult to find anything in it.

In 1837 a systematic enquiry into these claims was begun estate by estate and village by village. Every claim within a village received a consecutive serial number in a *general register* kept of all such claims in each district. The total number of entries made was—

Cuttack	...	...	...	...	149,522
Puri	...	...	...	...	...
Balasore	...	...	...	...	81,673

These did not, however, include grants of petty areas for the support of village idols made during the settlement, nor the revenue-free lands within the permanently-settled estates, none of which have hitherto been registered. [The only exception I know of is mauza Sankharisahi in *Killa Patia* registered under Act VII (B. C.) of 1876].

Deducting the areas resumed, we find that the number of grants and the area confirmed as revenue-free amounted to*—

District.	No. of grants.	Area (acres).
Cuttack	73,269	127,995
Puri	33,391	91,728
Balasore	33,570	111,918
Total	130,510	331,641

In the end of paragraph 310 we find the total area recorded as falling to be 335,300 acres.

In Puri and Balasore the land shown under one entry in this register was treated as the "estate," but in Cuttack the number of entries was so large that

* These figures are taken from reports on Orissas tenures, and do not appear to be quite accurate.

all the entries referring to claims by one person under one *sanad* or batch of *sanads* were brought together in a *special register* under one entry. The number was thus reduced to 86,678. Each revenue-free property had thus in Puri and Balasore one number, the *general number*; in Cuttack both a *general* and a *special* number.

583. Act VII (B.C.) of 1876 introduced a new register of revenue-free lands, "B. Part I," which professes to be an up-to-date record of all the ~~revenue~~ lands in the district and their proprietors. In the Puri and Balasore districts it is based on the "general" register, in Cuttack on the "special" register. In Balasore and Puri it has been practically reconciled with the former register; in Cuttack it not only contains many inaccurate entries, but by an order of Government, dated 7th July, 1888, revenue-free estates having an area of less than two ~~mans~~ were exempted from the obligation to initial registration.* The form of the register and the nature of the entries will be shown by the following copy of the last entry in the Cuttack register:—

B: PART I.

General Register (Part I) of revenue-free lands showing lands held exempt from revenue in perpetuity in the district of Outlask. [Sections 9 and 10, Act VII (B.O.) of 1876].

No.	PARTICIPIARS OF ORIGINAL GRANT.						REGISTRATION BY MARRA AND LOCAL DIVISION.					Area in acres by survey or other authentic measurement in each case.	Reference to entries in earlier registers relating to the property or any part thereof.	Reference to entries made in the income data register
	Name of revenue-free property with the tenure, who then jagir Allwajals character of, &c, &c	Date of grant	Original grant ed	Name of grant ter.	Name of original grantees	Reference to any decree or order of competent authority declaring or recognizing the grant to be valid.	Name and address of proprietors and managers, with character and extent of the interest of each proprietor-manager.	Name of man.	In what district and thana, or in other district being entered last.	Number in man.	Number in man.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2664	Ramdhani Gosain, shobait of Madan Mohan Jiu Doctor, Special No 28077					There are no records of this number as the special number was made anew, as per Board's order dated 8th August 1891, as these columns were not filled up.	Mohant Mathur Mohan Gosain of Mantia, Pargana Baidin, Orissa.	Proprietor, M. G. B. 04 11 0	Mauza Baitamundi, Pargana Jajpur, Do, Mauza Katanpuri Pargana Jajpur, Do, Mauza Gohirapara, Pargana Jajpur, Do, Mauza Bahania, Pargana Jajpur, Do, Mauza Baidinpur, Pargana Jajpur, Do, Mauza Kishadab, Bhampur, 1 segana Jajpur, Do, Mauza Bahania, Pargana Jajpur, Do, Mauza Kartikapur, Pargana Jajpur, Do.	Jajpur 211, Do, Do, Do, Do, Do, Do, Do, Do, Do.	No. 211, 240, 248, 200, 170, 204, 200, 204, 200.	M. G. B. O. 0 2 14 0, 10 0 2 0, 20 10 0 0, 11 0 0 20, 0 10 10 0, 0 10 1 0, 11 0 0 20, 7 4 14 0.	No. 27107, 27271, 26701, 42160, 24671, 21225, 42160, 21706.	
								Total				26 11 0 0		

Besides these there are two *mausawar* registers in which the total area of each grant (i.e., general number) in the village is shown; the Pargana *mausawar* register prepared after the last settlement, and Register C under the Land Registration Act arranged by Thanas. The unit of attestation in all the *lakhiraj* statements of this settlement was the grant in the village or "general number," though where two or more such "general numbers" were in the possession of a single group of *lakhirajdars* and could not be distinguished such numbers were lumped together in a single statement, and in other cases a "general number" has been divided over two or more villages.

In 1897 the Director expressed the opinion that it was essential that the unit of the Collector's B Register should be reconstituted, and an attempt was made in Cuttack to bring all lands attested as revenue-free under their own special number.

In 1898, however, it was decided, in consultation with Mr. Lyon and the Commissioner and Collectors, that a strictly *nauwawar* form of register following our *lakkari* statements would be of far more practical use than the existing

* Notification No. 4457-2, of the 22nd November 1999 substituted two names for two names.

registers, and in a letter, No. 2154, dated 26th August 1898, to the Commissioner of the Division, I proposed the following form of register:—

B.

General Register (Part I) of revenue-free lands showing lands held exempt from revenue in perpetuity in the district of [Sections 9 and 10 Act VII (B.C.) of 1876.]

VILLAGES		Serial number in the district of holding	General number of the grant.	NAMES AND ADDRESS OF <i>lakhirajdar</i> AND EXTENT OF INTEREST.			Area in possession of <i>lakhirajdar</i> shown in column 8.	Total area of <i>lakhiraj</i> in the general number.	Special number (if any)	Nature of <i>lakhira</i>	Date of confirmation as <i>lakhiraj</i> .	REMARKS. (Note here the name of any village in which other portions of the same general number are included.)
Thana number	Name			Name.	Address.	Extent of interest.						
1	2	3	4	5	6	7	8	9	10	11	12	13

The great advantages claimed for this form were—

- (1) That given the name of Thana, village, and *lakhirajdar* the number could always be found; and given the Thana and number, the name of the village and of the *lakhirajdar* could be found.
- (2) That it would obviate the necessity of giving in the C Register more than the total area of revenue-free land, and so make it more handy and compact.
- (3) That it would be far easier to compile than a statement in the form of the existing registers under the Land Registration Act.

The change was no doubt a very material one, and it was admitted that to prevent confusion it would be necessary to maintain, at least for some years, the existing registers, but the following change had already been allowed that would have made it very difficult to maintain in its entirety the existing system.

584. At the last settlement every revenue-free property that had not been recognised as a separate *mahal* was treated as part of the revenue-paying estate out of which it had been formed, and to this day the great majority of the revenue-free estates of the Province pay their road cess through the zamindars of the *taluk*. The law, Act VII (B.C.) of 1876, however, recognises those properties as estates just as much as those that pay revenue, and in the records of this settlement all mention of any superior estate has under orders from the higher authorities been omitted, and it is likely that the connection will be dropped.

585. The following statement will show at a glance the number and area, past and present, of the revenue-free properties dealt with in this settlement:—

Area now recorded as revenue free

District.	No. of general numbers dealt with.	No. of separate entries in the register.	TOTAL AREA IN ACRES.	
			Last settlement.	Present settlement.
Cuttack	72,900	60,600	134,400	133,400
Puri	23,400	24,600	90,800	92,600
Balasore	38,600	64,300	106,000	108,900
Total	...	129,900	331,000	334,900

It is in the first place noticeable that while in Puri and Balasore the number of properties as now recorded is more than the number of entries in the general register, in Cuttack it is less. The difference is due to the fact that while in Cuttack the unit of entry in the new register is the land recorded

in a single comparative statement covering sometimes two or more general numbers within one special number*, in the other two districts the unit was the *khatian*, of which two or more might be prepared for a single statement.

The *lakhiraj* area in Cuttack shows a decrease of 1,000 acres, but in the whole Province the area has increased by one per cent.

586. The average area of a revenue-free property is now 2.40 acres against 2.55 acres at the last settlement. The average size of a revenue-free property. average is much larger in Puri owing to the number of wholly revenue-free villages, and is smallest in Balasore owing to the system on which the register has been prepared.

587. No figures have been compiled in Cuttack and Puri to show the number of *lakhirajdars*. At the last settlement it was usual to record only one name for the general or special number, but under Act VII (B.C.) of 1876 it was necessary for all persons claiming an interest to record their names.

Mr. Kingsford found in Balasore that for every hundred proprietors at the last settlement about 176 names are recorded in the B Register and 209 in the *khatians*. This would give the number of recorded proprietors in Balasore at about 70,000.

588. Figures showing the number of raiyats of *lakhirajdars* have been compiled for Cuttack and Balasore, and are abstracted in the following statement:—

Raiyats of *lakhirajdars*.

District.	No. of raiyats.	ACRES IN ACRES HELD BY RAIYATS.		
		Cultivated.	Uncultivated.	Total.
Cuttack ...	48,100	53,700	800	54,500
Balasore ...	64,400	59,000	900	59,900
Total ...	148,500	112,700	1,700	114,400

Thus about 47 per. cent of the revenue-free lands are recorded as leased to raiyats, and adopting the same figure for Puri, we should have an area of some 37,000 acres in the possession of raiyats.

The average area of each such holding is only .77 of an acre, and the smallness is accounted for by the fact that these tenants are by custom treated as mere under-raiyats and of inferior status to raiyats of the *mahal*.

In Balasore, money rent is paid for 51,400 acres, the average incidence being Rs. 1-14 per acre, or slightly more than the average settled rent of an occupancy raiyat (the *pahi* incidence of the district is Rs. 1-13 and the *thani* incidence Rs. 1-15). Three thousand acres are held rent-free, generally in payment of services to the *lakhirajdar* or to the shrine. Five thousand three hundred acres pay *dhulibhag*, and over 200 acres pay *sanja*, consisting of paddy, rice, *ghi*, *birhi*, or *muga*.

In Cuttack, in 450 villages, for which figures are available, 9,000 acres pay cash rents amounting to Rs. 21,000, or an average of over Rs. 2-5 per acre (the *pahi* incidence of the district is Rs. 2-14). One thousand eight hundred acres pay *dhulibhag*, 1,100 acres are rent-free, and only 11 acres pay *sanja*. Applying the same proportion to the district, we get some 41,000 acres paying a cash rent of Rs. 96,000, 5,000 acres rent-free, 8,000 acres held on *dhulibhag*, and 50 acres held *sanja* rents.

To nearly all these tenants occupancy rights have been given in the present settlement, and though copies of their *khatians* have not been distributed *gratis*, they have been allowed every facility for obtaining them.

Sales of *lakhiraj* lands.

589. The price of *lakhiraj* land may be taken as the full measure of the value of freehold landed

property in Orissa.

The following table shows the sales of *lakhiraj* lands during the last ten years, as taken from the returns of the Registration Department; they include

* The number of *khatians* of *lakhiraj* lands in Cuttack is about 116,000.

bazyasti tenures, which are commonly described by the owners as *lakhiraj* and sold along with revenue-free lands:—

District.	Number of transactions.	CLASS OF PURCHASER.					Purchase money.
		Mahajans, traders and money-lenders.	Zamin-dars.	Intermedi-ate tenure-holders.	Raiyats.	Others.	
1	2	3	4	5	6	7	8
Cuttack ...	14,066	786	1,883	8,189	614	2,594	2,34,568*
Balasore ...	7,723	450	1,308	4,233	1,013	719	5,25,377
Puri† ...	1,166	63	111	286	108	762	1,68,843
Total ...	22,955	1,299	3,302	12,708	1,735	4,075	9,18,788

* For two years only.

† For three years only.

The figures do not show that the number of transactions has materially increased since the settlement began.

In Balasore Mr. Kingsford finds the average price of revenue-free land per acre to be Rs. 70, and the variation to be from Rs. 50 to Rs. 100 per acre.

This would give the area transferred by sale in ten years at 7,500 acres, of which by far the greater part must be revenue-free, so that the sales may be taken as one two-hundredth part of the whole area every year.

In Cuttack the price per acre as noted at the time of attestation and settlement varies from Rs. 50 to Rs. 200, and is generally about Rs. 100. This would give the area transferred in two years at about 2,345 acres or rather less than one per cent. of the total area per annum.

590. To find the income enjoyed by the *lakhirajdars* of Orissa, we may assume that the profit from lands in the immediate possession of the proprietors is equal to that derived from lands let on *dhulibhag*. Assuming the produce of an acre at 16 maunds of paddy worth Rs. 1¹/₂ per maund, and 27 maunds of straw at 9 maunds to the rupee, the value of half the produce is Rs. 10-8 per acre

In Cuttack the area in possession of the *lakhirajdars* is about 78,900 acres of which 68,000 acres are cultivated. The income from this may be taken at Rs. 7,14,000. To this must be added Rs. 96,000 realised as rent from cash-paying raiyats and Rs. 84,000 for produce rents, making a total of Rs. 8,94,000.

In Balasore the cultivated area in the possession of the *lakhirajdars* is about 41,400 acres, yielding an income of Rs. 4,35,000.

The income from cash rents is about Rs. 96,000, and from produce rents Rs. 57,000, making a grand total of Rs. 5,88,000.

In Puri no separate figures are available for cultivated and uncultivated or for *nijhas* and raiyati land, but we may take it that the cultivated area is 72,000 acres and that of this a third is let on cash rents at about Rs. 2 per acre, or for a total of Rs. 48,000. The remaining 48,000 acres held *nijhas* or let for produce rents will bring in about Rs. 5,04,000, so that the total income from the land will be about Rs. 5,50,000.

To estimate the revenue assessable on the *lakhiraj* lands we may assume that cultivated lands should be assessed at Rs. 2-14 per acre in Cuttack; at Re. 1-13 in Balasore, and at Re. 1-15 per acre in Puri; and that 55 per cent. would be taken by Government as its share.

Then the revenue would work out as follows :—

District.		Cultivated area of <i>latkirej</i> land.	Assessment of cultivated lands.	55 per cent of gross assessment.
		Acres.	Rs.	Rs.
Cuttack	...	122,000	3,50,000	1,92,000
Balasore	...	100,000	1,80,000	99,000
Puri	...	72,000	1,40,000	77,000
Total	...	294,000	6,70,000	3,68,000

The revenue alienated by Government may thus be taken as Rs. 3,68,000, or about a sixth of the revenue of the temporarily-settled estates.

CHAPTER XXIV.

TRIBUTARY MAHALS AND PERMANENTLY-SETTLED ESTATES *.

591. I have in an earlier chapter of this report already stated that besides the landholding classes in the *Moghulbani* there were in the hill country feudatory chiefs†, who, while paying tribute and under obligation of military service to the suzerain, were uncontrolled in the internal administration of their estates, and never wholly subdued by Moghul or Mahratta. Foremost among them was the chief of Mohurbhanj, descended from the Hindu kings of the Peacock race, who formerly ruled over a territory of more than 7,000 square miles stretching from Midnapur to Cuttack and westwards to the tableland of Chota Nagpur. Two hundred years ago Keonjhar broke away from Mohurbhanj, but the latter still embraces 4,243 square miles with a population of half a million, so that it corresponds in size to an average Bengal District.

The next estate in importance is that of Dhenkanal, whose Raja is of royal family, and was, until recently, looked up to as their lawful suzerain by the other rajas. Athgarh again was a present to the prime minister of some ancient monarch. Bod and Daspalla are held by rajas who claim a direct descent of seventy generations from the original Brahman holders. Nilgiri is the property of a chief descended from the daughter of the king of Orissa, Raja Pratap Rudra Deo, who married the son of the Raja of Chota Nagpur. Such and similar were the histories of the feudal chiefs whom we found in 1803 ruling over a territory of more than 14,000 square miles between the plains of Orissa and the plateaux of Chota Nagpur and the Central Provinces.

This country forms a succession of fertile valleys separated by rocky hills overgrown with *sāl* forest or low jungle culminating to the north-west in the lofty peak of Malayagiri, 3,895 feet above the sea-level, and to the south ending in the tablelands of the Khondmals, formerly part of the State of Bod, but now attached to the scheduled district of Angul. The capitalists, shopkeepers, and most prosperous cultivators of these wild regions are Uriya Banias, but the bulk of the people are non-Aryans belonging to the Kols, Kandhs, and Savar tribes.

Already before the conquest of Orissa the State of Mohurbhanj had become a feudatory of the East India Company, and the other chiefs recognising in the British troops their deliverers from the Mahratta tyranny made no attempt to bar their progress, but willingly executed agreements (*akramana*) for the payment of the very moderate tribute the first Commissioners thought fit to require.

592. In a newly conquered country, and with the Mahratta power not yet wholly broken, it was clearly politic to conciliate the chiefs of these mountain regions and their barbaric subjects, and to do so it was most needful to guarantee them that freedom from internal interference that they had ever enjoyed.

* See Chapter X, paragraphs 233 and 235.

† *Sauwats, Shebaks, and Mahanais.*

Accordingly, by Section 36 of Regulation XII of 1805, fifteen such mahals or states were excluded from the operation of the General Regulations, and by Section 37 of the same regulation the privilege was extended also to Mohurbhanj.

In 1810 Banki was confiscated, (the Raja having been convicted of a flagrant murder), and by Act XXV of 1881 it was attached to the District of Cuttack and is now managed as a *khas mahal*. In 1847, the Raja of Angul rebelled against the Government. He was, therefore, dispossessed of his estate, and Angul, with the Khondmals, which had been ceded by the Raja of Bod, was made into a separate scheduled District under Act XIV of 1874.

On the other hand the Tributary States of Bod and Athmalik were; in 1837, transferred to Cuttack, and Pal Lahora has been separated from Keonjhar.

There are now, therefore, seventeen such States, viz :—

District to which attached.	State.	Area in square mile.	Population.	Tribute.
Cuttack	{ Athgarh	168	36,603	2,800
	{ Athmalik	730	31,605	480
	{ Bod	1,264	89,551	800
	{ Baramba	134	32,526	1,398
	{ Daspalla	568	45,597	661
	{ Dhenkanal	1,463	238,285	5,099
	{ Hindol	312	37,973	551
	{ Khandapara	244	63,287	4,212
Balasore	{ Keonjhar	3,096	248,101	1,977
	{ Mohurbhanj	4,243	532,238	1,068
Cuttack	Narsingpur	199	33,849	1,455
Puri	Nayagarh	588	117,862	5,526
Balasore	Nilgiri	278	56,198	3,900
	Pal Lahera	452	19,700	(a).....
Cuttack	{ Taleher	399	52,674	1,040
	{ Tigiria	46	20,546	882
Puri	Ranpur	203	40,115	1,401
Total		14,387	16,96,710	33,250

(a) Subordinate to Keonjhar.

With these States the present settlement is in no way concerned. By Regulation XII of 1805, they are exempted from the operation of the Revenue Laws, and from that of the Police Regulations by Regulation XIII of the same year.

They are without the jurisdiction of the ordinary Executive and Judicial officers of the Province, and within their own territories the chiefs administer civil and criminal justice, subject to the control of the Superintendent of the Tributary Mahals, whose powers are defined by Regulation XI of 1816, and by the agreements entered into by the chiefs, the latest agreement being the Viceroy's *sanad* of 1894. The Collectors of the three Regulation districts are *ex-officio* Assistants to the Superintendent; but only the Collector of Balasore exercises such functions; all the routine work being disposed of by the Special Assistant, who is a Deputy Collector and has the powers of a Magistrate.

593. Besides the feudal chiefs already mentioned, there were, within the *Moghulbandi* or *Rajwara*, a few landowners of a superior class, descendants of noble families or of high officials to whom large estates had been assigned for their maintenance, subject only to the payment of a quit rent. Such were the Rajahs of Kanika and Kujang, who were originally of the royal house of Mohurbhanj and were established in their possessions about the thirteenth century A.D. under the Gajapati dynasty. The Rajas of Khurda, Aul, and Patia were descendants of the last Hindu kings of Orissa, and were confirmed in their estates by Todar Mal in the sixteenth century. Besides these, there were all along the sea coast between Puri town and Kujang, a number of estates denominated *garhs* or *killas* held at a quit rent by chiefs called *Khandaits* or *Garh Khandaits*. The proprietors of these, like their more powerful neighbours of Aul, Kujang, and

Kanika, paid but a light *peskas*, kept bands of *paiks*, and were bound to render military service when called upon. Upwards of 50* estates of this nature at one time existed in the Province, but under the Mahrattas few of them maintained the privilege of paying only a quit rent, and most had by slow degrees been reduced to the position of ordinary zamindars. These petty chiefs, at the time of the British conquest, made some attempt at resistance, but they gave way on the approach of the troops and were pardoned, and in recognition of their ancient lineage, and to secure their loyalty, Government, by section 35 of Regulation XII of 1805, confirmed in perpetuity the revenue tribute, or *peskas* of Khurda, Aul, Kujang, Kanika, Harisipur, Marichpur and Bishanpur.

Section 33 of the same regulation also secured from enhancement the revenue fixed by the *sanads* granted to the *khandail* zamindars of Darpan, Sukinda, and Madhupur. These men were adventurers from the north-west, and though equally independent, were of inferior rank to the rajas of the sea-coast. They received *sanads* and executed *kabuliyats* for the payment of revenue, while the chiefs of Aul and similar estates executed agreements and received acknowledgments (*quaulnama*) of their right to hold at a quit rent (*peskas*).

To illustrate the difference I here reproduce the agreement and its acknowledgment executed in respect of the Kanika estate, and also the *sanad* and *kabuliyat* of the Raja of Sukinda.

591. Treaty engagements (*ikrarnama*) executed by the Raja of Killa Kanika, in zilla Cuttack to the Hon'ble East India Company's Special Commissioners for the Subah of Orissa, Messrs. Harcourt and Melville.

The engagements of a *peskas* *mahat*.

I, Balbhadr Bhanj, Raja of Killa Kanika in the Subah of Orissa, engage faithfully and correctly to abide by this engagement, entered into by me with the Hon'ble East India Company, as contained in the following clauses to wit:—

Clause I.—I will always hold myself in submission and loyal obedience to the Hon'ble East India Company aforesaid.

Clause II.—I will continue to pay, without demur, to the said Government as my annual *peskhush* or tribute 81,840 kahans of cowries in three instalments as specified hereinbelow.

Clause III.—I will, on demand to that effect, cause any person who is an inhabitant of the Subah appertaining to the Hon'ble Company aforesaid, and who may have fled and come into my territory, to be forthwith arrested and delivered over to the Government.

Clause IV.—Should any person, who is a resident in my territories, commit a crime within the limits of the *Mogulbandi*, I hereby engage, on demand to that effect, to cause such person to be arrested and delivered over to the Government authority. Moreover, I further bind myself, in cases where I may possess any claim or demand on one who is an inhabitant of the *Mogulbandi*, not of my own authority to enforce such claim, but I will notify the same to the constituted authority, and will act in accordance with such orders as may issue from him.

Clause V.—I engage that whenever the troops of the Hon'ble Company's Government shall pass through my territories, I will direct the people of my *killah* to supply to the extent of their capability, all *rasad* and supplies, which shall be sold at fair prices. Further, I will on no manner or pretext whatever ever stop or detain, or offer any let or hindrance to any subject of the Hon'ble Company's Government or to any other person whatsoever, who may be proceeding by land or water, with goods or orders or with any *parwana* on the part of Government, through my boundaries, and will rather take care that no loss or inconvenience shall befall such parties, in life or goods.

Clause VI.—In case any neighbouring Raja or any other person whatever shall offer opposition to the said Government, I engage, on demand and without demur, to depute contingent force of my own troops with the forces of Government for the purpose of coercion, investigation, and the bringing of such recusant into subjection to the aforesaid Government. Such contingent to receive only rations (or ration allowances) agreeably to the previously current practice, so long as they shall be present.

These shall be the instalments of my *peskhush* to be paid:—

			Kahans.
In the month of	<i>Chait</i>	...	28,840
Ditto ditto	<i>Jyestha</i>	...	28,800
Ditto ditto	<i>Ashar</i>	...	28,000

Dated 7th December 1803.

(Signed) RAJA BALBHADRA BHANJ.

The following is the *Qaulnama* or *Sanad* of acknowledgment executed to Raja Balbhadra Bhanj Bahadur of Killa Kanika by the Hon'ble East India Company's Commissioners for the Subah of Cuttack:—

We, Lieutenant-Colonel George Harcourt commanding the victorious troops of Hon'ble East India Company and Commissioner of the Subah of Orissa, and John Melville Commissioner of the same appointed by the Most Noble the Marquis of Wellesley, Governor-General, for the settlement and pacification of the said Subah, do on behalf of the East India Company, execute this acknowledgment as set forth in the following paragraphs, to Raja Balbhadra Bhanj Bahadur, Raja of Killa Kanika in the said Subah of Orissa.

Clause I.—The annual *peshkash* payable by the Raja for his *rajgi* of the said Killa is fixed in perpetuity at 84,840 kahans.

Clause II—No further demand, however small, shall be made on the said Raja or received from him as *nazzar*, supplies or otherwise.

Clause III.—The Government of the Hon'ble East India Company, it is well known, is ever gracious to those Rajas who are always loyal and obedient to them and constant in the impartial administration of justice to all its subjects alike, and therefore in like manner extends the same impartiality to Raja Balbhadra Bhanj Bahadur and seeks always his prosperity and peace. Therefore any just representation or complaint made to the Government by the said Raja of Kanika will meet with a decision in accord with Justice.

Dated the 22nd November 1863.
Sraban 6th 1211.

}

(Signed) GEORGE HARCOURT

* Lieutenant-Colonel.

(Signed) JOHN MELVILLE.

Engagement of a zamindari estate.

595. Copy of a *kabuliyat* executed by Dhrubji Bhuban Harichandan, Zamindar, Killah Sukinda:—

I, Dhrubji Bhuban Harichandan Mahapatra, zamindar, Killa Sukinda, in the province of Orissa, do hereby execute this *kabuliyat* out of my full and free consent, that having been appointed to hold the service of zamindar in the killa by Government, I will collect the rents, according to former rates, agreeably to the laws of the Government. That I will pay the annual revenue due to Government in instalments specified below without any excuse. That I will keep the raiyats prosperous and contented, and exert myself to improve the lands so that they will bring forth more crops than they did before. That I shall not allow an inch of cultivated land to fall waste. That I will never allow the growing of inferior crops in superior lands. That I will not be prodigal in my expenses, nor allow my raiyats to be so. That I will never grant any land in gift or *jagir* without a *sanad* of the Government. That I will keep a watchful eye over the boundaries of my zamindari. That I will vigilantly watch that no guns or swords, or any sort of offensive weapons, are manufactured in my estate. That there will never occur any thefts or murders within the same. Should any robbery occur, I will trace out the offenders, and recover the property stolen and send them over to the authorities. Accordingly, I do hereby execute this *kabuliyat* which will serve whenever it be required hereafter.

Jama peshkash in perpetuity, 5,500 kahans.

Instalments.

	Kahans.
<i>Fagon</i>	1,000
<i>Chytra</i>	1,500
<i>Bysakh</i>	1,500
<i>Jesth</i>	1,500
Total	5,500

Rate being 4 kahans the rupee.

Translation of the *sanad* granted to the above estate:—

Be it known to the old and newly created Chaudhris, Kanungos, *Mugaddams*, *Dulbeheras*, and raiyats of Killa Sukinda, in the Province of Orissa, that whereas Dhrubji Bhuban Harichandan is in possession of the said Killa heretobefore, and therefore, the zamindari of the said *killa* is granted and assigned to him by Government, you are hereby ordered to consider him as your zamindar, and never to wander from his lawful and salutary commands; you are never to conceal any matter from his knowledge; you will pay the rent to the zamindar, according to laws promulgated by Government, according to former rates and customs. The zamindar is to pay timely, by instalments, the annual revenue of 5,500 kahans of cowri as fixed by Government. He is to keep the raiyats contented, that the productive powers of the lands may increase more than what it was before; that the zamindar will keep a watchful eye that no guns, swords, or offensive weapons be manufactured within the estate, and that there shall occur no robbery or murder, if it occurs he will arrest the thieves with the recovered property and deliver the murderers to the authorities.

596. Section 34 of Regulation XII of 1805 confirmed the *sanad* granted to Fateh Mahomed, *jagirdar* of Malud by the first

The *jagirs* of Fateh Mahomed. Commissioners entitling him and his heirs for ever to hold their *jagir* free of assessment in consideration of their services to the British troops. Tradition says that at the time when Fateh Mahomed undertook to guide the advancing army across the swamps of the Chilka he was promised every village through which the troops passed, and that their route was in consequence somewhat circuitous; but, be this as it may, he was afterwards dispossessed of a large area by the Raja of Parikud.

597. Regulation XII of 1805 thus gave a permanent settlement to twelve estates in all, but in 1804 the Raja of Khurda foolishly rebelled, and was dispossessed, his estate being held as a *khas mahal*.

598. On the other hand, for some reason, the zamindar of Chhedra was allowed in 1803 a permanent settlement, and in 1805 Kalkala was separated from Darpan and made into a separate estate.

The revenue of Dompura*, which is a *jagir* and not shown as an estate on the revenue-roll, was in 1829 fixed for ever, subject to a liability to enhancement in the event of alienation of the property.

599. There are thus in Cuttack at the present time twelve permanently-settled estates as shown in the following list:—

		Tauzi No.	Area in square miles.	Revenue. Rs.
1.	Patia ...	Nil	53.22	Nil
2.	Madhupur ...	16	64.76	6,175
3.	Dompura ...	Nil	83.09	1,333
4.	Aul ...	23	139.00	28,133
5.	Bisampur ...	13	17.71	1,856
6.	Harisipur ...	15	50.32	3,635
7.	Sukinda ...	12	337.55	1,364
8.	Darpan ...	18	99.71	7,310
9.	Kalkala ...	19	18.75	131
10.	Chhedra ...	17	83.38	2,259
11.	Kanika ...	21	439.81	20,408
12.	Kujang ...	14	370.01	7,503
Total			1757.31	80,107

There are also two petty *tanki bahal* estates *arazi jagir bazyasti bati tanki mauza* Kalianti, and *arazi jagir bazyasti bati tanki mauza* Umaroger bearing *tauzi* Nos. 1852 and 1853 in Pargana Matkatnagar, of which the revenue is fixed in perpetuity.

In the Puri district, there is, strictly speaking, only one permanently settled estate, Marichpur *tauzi* No. 1, which was given a permanent settlement by section 35 of Regulation XII of 1805, and has an area of 52.29 square miles and a revenue of Rs. 3,329.

The Parganas of Malud, Bajrakot, Manickpatna, and Andhari compose the *jagir* mahals confirmed as revenue-free by section 34, Regulation XII of 1805. Their total area is 72.57 square miles.

Parikud, with a total area of 67.52 square miles, formed originally part of the *jagir* mahals, but is now held in adverse possession by the Raja of Parikud.

In Balasore there are 150 permanently-settled estates lying in eight Parganas in the north of the district. They were originally contained in Midnapur and borne on the revenue-roll of that district, but were transferred to Balasore, on revision of the boundary in 1868. The area of these estates according to the old revenue survey map was 127,118 acres, while according to the *mahabhar* register in the Collectorate it amounted to 118,990 acres. The present survey exhibits the area as 121,376 acres, and the total revenue paid is Rs. 34,835. These areas are exclusive of the *jalapahi* estates dealt with in paragraph 611 of this Chapter.

* See paragraph 610.

600. All the estates of which the revenue has been fixed by Regulation XII are known as *killajat*, and there are certain peculiarities in the tenure common to all such as are still in the hands of the old proprietors.

Incidents of tenure in *killajat* estates.

In the first place the inheritance to the ownership is governed by the law of primogeniture, and from this arises a necessity of providing for the younger members of the family.* This is done by assigning to the brothers and other near relatives villages or parts of villages for their support under such names as *baradaran jagir*, *khoraḥ posak niskar*, etc. These grants are generally heritable, but not transferable, and the head of the family claims the right to resume on the failure of direct heirs, and adoption is not recognised. In estates of this class are also found numerous grants for religious or charitable purposes, many being of exactly the same nature as the revenue-free properties of the temporarily-settled area, but as their titles have never been enquired into by Government, the grantees continue to be treated as mere rent-free holders, and are, to some extent, subject to the control of the raja or zamindar and liable to be dispossessed for failure to carry out the conditions of the grant.

Military service has not been required of these chiefs since 1805, when the *chaupani* tax levied by them for military service was abolished, but for many years they continued to form a turbulent and unruly section of our subjects; and to this day generally exercise a somewhat despotic authority over their tenants. When these estates pass into the hands of speculators or strangers, as has been the fate of Darpan and Harispur, those peculiar incidents cease to exist, and the succession is governed by the personal law of the purchaser.

601. Before the present settlement began, a survey and record-of-rights was already in course of preparation in the Kujang and Kanika estates, and in the *khas mahal* of Banki.

Survey and Settlement of permanently-settled estates.

The question as to the preparation of a survey and record-of-rights in the remaining permanently-settled areas of the province having been raised, His Honour Sir Charles Elliott, in his Note of the 19th October 1891, wrote:—

As to these (permanently-settled estates), I have decided that if they lie altogether outside the limit of temporarily-settled estates we may leave them alone. If they are mixed in with those estates, the survey must take them in its stride; and even if they lie outside, but are irrigated by canal water, they must be surveyed.

The notifications for survey and settlement in Cuttack were accordingly framed so as to exclude—

- | | |
|---------------|-----------------------|
| 1. Bishunpur. | 5. Sukinda. |
| 2. Harispur. | 6. Aul. |
| 3. Darpan. | 7. Dompura. |
| 4. Kalkala. | 8. Patia (a portion). |

In Puri the whole area (excluding the subdivision of Khurda) had already been notified for survey, but by a notification of the 15th December 1891, the order was cancelled so far as it concerned the six Parganas of—

- | | |
|---------------|----------------|
| 1. Marichpur. | 4. Manikpatna. |
| 2. Malud. | 5. Andhari. |
| 3. Bajrakot. | 6. Parikud. |

Before receipt of this order, Parganas Manikpatna and Andhari had already been cadastrally surveyed, but the record was not completed.

In Balasore all permanently-settled estates were excluded from the notification. The only considerable permanently-settled areas of which the survey and settlement were undertaken, in pursuance of Sir Charles Elliott's orders, were the irrigated portions of *Killas* Aul and Darpan, *Killa* Chhedra, and the outlying portions of *Killa* Patia, all in the district of Cuttack. *Killa* Madhupur has been settled at the instance of the Court of Wards.

602. Before dealing with these estates in detail, I must give an account of the action taken in respect of the excluded area.

Topographical Survey.

In 1894, the officer in charge of the Orissa Survey reported that the permanently-settled estates of (1) Patia, (2) Harispur, (3) Bisunpur, (4) Dompura, (5) Kalkala, (6) Sukinda, and (7) part of Darpan in the Cuttack District; (1) Parikud, (2) Malud, (3) Bajrakot, (4) Marichpur in the Puri District; (1)

Bhograi (a portion), (2) Fatehabad, (3) Bheprachour, (4) Napachour, (5) Chak Ismailpur, (6) Birkul, (7) Kankarachour, and (8) Mirgoda, in district Balasore—had not been surveyed, and enquiries were made, at the instance of Colonel Sandeman, from the proprietors of those estates as to whether they wished to have a survey on a larger scale than that of 4 inches=1 mile.

Very few took any notice of the letters addressed to them.

The proprietor of Darpan had already applied for the settlement of his estate; the Rajas of Parikud and Aul would have liked a cadastral survey without paying for it, but the proprietors of Sukinda, Haripur, and Dompara objected to having any survey whatever made within their villages.

Accordingly the Director of Surveys proposed a survey on a scale of 4 inches = 1 mile; but after some discussion as to the cost, it was decided that a topographical survey, scale 2 inches to the mile, would suffice, and it was carried out by Mr. Ewing in the season of 1894-95, under notification No. 5319 of 3rd December 1894, at a cost of Rs. 31,130.

603. Darpan, with an area of 97·7 square miles and a land revenue of Rs. 7,310, is one of the estates held under a *sanad* at a *jama* fixed in perpetuity, and is now owned by Raja Baidyanath Pandit, who purchased it at a sale for debt*.

It is on the extreme west of the District, and is divided into two distinct portions by the High Level canal, the land to the west being hilly and to a great extent covered with jungle, that to the east consisting of paddy lands mostly irrigable.

During the season of 1891-92, all that portion of Darpan lying near to the High Level canal was cadastrally surveyed and records were prepared for the use of the Irrigation Department in respect of 223 villages with an area of 34,399 acres.

In the end of 1892 Raja Baidyanath Pandit applied for the completion of the survey and attestation of all the cultivated portion of his estate (*vide* Mr. Maude's letter No. 2 of the 30th December 1892) and on the 17th April 1893, notifications were published under section 3 of the Bengal Survey Act V of 1875, and under Section 101 (2) (a) of the Bengal Tenancy Act, ordering the survey and preparation of a record of rights for all lands contained in *killa* Darpan, leaving it to executive orders to confine the survey and settlement operations to the cultivated area only (Board's letter No. 320A. of the 28th March 1893, paragraph 3, to the Secretary to the Government of Bengal).

From the 1st August 1893, Mr. Taylor was appointed and at once commenced the attestation of the irrigated villages, but the Raja coming to terms with his tenants applied on the 18th September to stop all further proceedings, and by a notification on the 7th February 1894 under section 101 (1) of the Bengal Tenancy Act, the preparation of a record-of-rights was limited to the villages lying to the east and south-east of the High Level canal, *i.e.*, to the irrigable areas. As records had been prepared for these, work was stopped, the cost incurred up to date being (*vide* Settlement Officer's letter No. 1627 of 23rd June 1898):—

				Rs.
For survey	...	...	...	10,635
For attestation	...	...	...	3,974
For Mr. Taylor's re-attestation in 1893-94	...			2,628
			Total	17,237
			Deduct—Paid by the Raja	2,627
			Net cost	14,610

In 1899, the Raja having apparently failed to effect a private settlement, applied for the completion of the record-of-rights. This application was backed by the District Officers, and was recommended to Government in letter No. 636, dated 17th March 1899.

The subsequent proceedings form no part of the general settlement operations in Orissa, as the work is now being carried on under the supervision of the Collector of Cuttack.

* Since the above was written, Raja Baidyanath Pandit has died and his son has succeeded him.

of the late Raja Padmalabh Bhanj, and as he was in 1865 declared insane, it continued to be held by the Court of Wards until his death in 1891, and since then has been managed by the Court on behalf of his minor (adopted) son, Nrupendranath Bhanj, and after his death in 1895 on behalf of the minor (adopted by the Rani) Rajendranath Bhanj, who is a natural son of the Raja of Aul.

Between 1865 and 1871, a second settlement was made of this estate, but no cadastral survey was made until 1888, when the cultivated portions were cadastrally surveyed under the supervision of Mr. Smart and subsequently settled by Mr. Sakhawat Hussain.

The assets of the estate are reported to be Rs. 1,36,064, but out of this large remissions have to be made, though the assessment is under Re. 1-4 per acre.

607. Killa Kujang* has a total area of 370 square miles, and consists of two distinct tracts; the first a marshy and almost uninhabited strip along the sea coast, and behind

Killa Kujang. this low-lying arable lands intersected by innumerable streams and tidal creeks which both inundate the land and supply means of irrigation in the cold weather. As in Kanika, the harvest is liable to be destroyed by storms and cyclones as well as by floods in the Mahanadi river.

The original Rajas of Kujang were descended from Mallick Sindh, Raja of Dhobaigurh, who lived in the seventeenth century, and with the help of the Raja of Kanika fought with and subdued the chiefs of the neighbouring *garhs*, amalgamating them all under the name of Kujang. At the time of the British conquest Gangadhar Sindh was in possession and executed an *ekranama* for the payment of a *peskas* of 14,011 *kahans* of *comics*.

In 1812 his son tried to instigate the Rajas of Kanika and Khurda to join him in conspiracy against the British authority, and the attempt being detected, he was dispossessed and imprisoned and his brother Birabhadra Sindh ruled in his stead and executed a new agreement for the payment of Rs. 7,501.

The estate was much affected by the famine of 1866, and in 1869 was sold for debt and bought by the Maharaja of Burdwan.

On the death of the late Maharaja, the estate came under the Court of Wards, and in 1887 a cadastral survey and settlement under Act X of 1859 was begun, and was completed in 1892.

The survey was carried out under Mr. Smart and, in the absence of any previous revenue survey, village boundaries were remodelled and the whole estate divided into 461 villages.

The arable portion was surveyed on a scale of 16 inches=1 mile; the marshy strip along the coast, some 90,000 acres, on a scale of 4 inches=1 mile.

The total assets were settled at Rs. 1,19,589 and the rents averaged Re. 1-14 6 per acre.

608. Killa Aul is one of the six killas the settlements of which on a permanently fixed annual quit-rent or *peskas* were confirmed by Regulation XII of 1805. It was

Killa Aul. granted in the reign of Akbar to a descendant of the Hindu sovereign Telinga Makund Deo, and has continued to the present day in the possession of his heirs.

At the time of the British conquest the estate was held by Raja Ramkrishna Deo, whose son Protaprudra Deo having impaired his mental faculties by dissolute habits, became incapable of managing the estate, which was in consequence taken under the management of the Court of Wards. The estate remained under the management of the Court till 1847 when Raja Protaprudra's son Padmalabh Deo having attained majority took charge of the estate with an accumulated treasure of Rs. 85,000. The young Raja, however, soon got into the ways of his father, and so heavily encumbered the estate with debts that it remained under the attachment and administration of the Civil Court for sixteen years from 1868-1883.

From the earliest times the estate has been managed on the *mustajari* system, each village being separately let out on a farming lease for five years.

In 1897 the present manager abolished the system, but as there are no reliable collection papers in his hands, the *ex-mustajirs* are still employed for collection of rents on commission.

The *killa* was excluded from the original notification regarding the survey and settlement of this District, but it was subsequently notified on the 12th December 1892 for survey and preparation of a record of rights under section 101 (1) of the Bengal Tenancy Act, and a further notification for survey under section 3 of the Survey Act was published on the 17th April 1893. The *killa* covers an aggregate area of 139 square miles, of which 51 square miles have been surveyed cadastrally and the rest surveyed on 2 inches=1 mile scale, and it comprises three Parganas—

- (1) Utilhar;
- (2) Kotabsahi; and
- (3) Derabusimul, commonly called Derabisi.

(1) and (2) are intermixed, and (3) forms a nearly compact block of 118 *mauzas*. The whole of Derabisi and three *mauzas* of Utilhar lie within the area commanded by the Patamundai canal and the Gobri Extension of the Kendrapara canal. Of these 121 *mauzas*, 67 situated on the right side of the river Gobri had already been surveyed on 32 inches=1 mile scale for irrigation purposes.

They were, however, revised, and the remaining 54 *mauzas* were surveyed on 16 inches=1 mile scale in the course of the present operations. All these *mauzas* having also been *khanapuri*d, the attestation of the Pargana was taken up in 1892-93, but was shortly abandoned owing to the opposition of the Raja. It was after much correspondence again taken up and the attestation completed in the season of 1898-99; after which work was suspended until the Raja should have deposited the estimated amount required for completing the operations.

The cost incurred in pargana Derabisi up to date* is shown below:—

	Rs.
(1) Survey and <i>khanapuri</i> (including the three irrigated villages of pargana Utilhar)	5,836
(2) Preliminary attestation in 1892-93	6,163
(3) Final attestation, including case-work and draft publication in 1898-99	6,777
Total	18,776
	Rs.
<i>Deduct</i> —	
(1) Amount paid for amins' fees	616
(2) Value of court fees	701
	1,347
Net charge	17,429

Owing to the persistent opposition of the Raja, Pargana Aul, apparently measuring Utilhar Kotabsahi, has been excluded from the Settlement operations by a notification, dated the 13th September 1894. An attempt was then made to make a private Settlement of this portion of the *killa* with the aid of a *kanungo* deputed by the Collector, but seeing the difficulty of carrying it out and the advantages of the authoritative settlement which is going on in Derabisi, the Raja has made an application under section 101 (2)* of the Bengal Tenancy Act† which is being dealt with by the Collector. The whole of Pargana Derabisi is protected from river-floods, but owing to the drainage of a large tract of similarly protected land on the western side passing through it into the Gobri the low lands called *pats* at times suffer considerable damage from accumulation of water. The pargana covers an aggregate area of 46 square miles, of which 39 square miles, or 85 per cent., are cultivated, and of this about one-fifth is now irrigated with canal water.

* That is, up to the date of completion of the attestation in September 1899.

† In their letter No. 1394, dated 20th March 1901, to the Board of Revenue, Government has since sanctioned, the completion of the survey and settlement of the whole *killa* at the cost of the Raja.

The existing rental of the attested villages is Rs. 33,519, or an average of Rs. 2-9 per rent-paying acre.

609. Killa Chhedra, though not *peskas mahal*, was permanently settled by the Board of Commissioners in 1803, but was omitted from Regulation XII of 1805. At the

Killa Chhedra.

time of the British conquest it stood in the name of one Madhu Sudan Narendro Mohapatra, who was succeeded in 1804 by his grandson Srinibash Narendro Mohapatra. In 1806 it was sold for the proprietor's debts and purchased in equal shares by Kashinath Roy Choudhury and by a Subordinate Judge named Golum Kadir in the *benami* of his son. The interest of the former is still held by his descendant, while that of the latter has been transferred partly by private sale and partly by execution sales for debts.

The estate is irrigable, and records having, therefore, been prepared, have been attested and finally published.

The estate covers an aggregate area of 5,390 acres of which 4,116 acres are cultivated, and of these again 432 acres, or 10 per cent. are at present irrigated with canal water.

610. Besides the permanently-settled mahals and the temporarily-settled

The temporarily settled *killajat* estates.*

estates of the *Moghulbandi*, there are in Cuttack and Balasore certain estates known as *killajat* and occupying an anomalous intermediate position.

These are Killas Dompura, Balrampur, Ragri, Chausatipara and Kantajhar in Cuttack, and Killas Ambo, Mangalpur and Patna in Balasore. They were in the Settlement of Raja Man Sinha in 999 A.D. left as part of the *Rajwara*; Ambo, Kantajhar, Ragri and Balrampur being all dependent fiefs of the zamindar of Keonjhar. The Muhrattas, however, resumed all these estates (except Dompura, which was of the nature of a *jagir*) and collected the revenue (*jama* not *peskas*) directly† but left in possession their former holders variously styled zamindars, *bhuians* and *khandaits*, and occasionally in later correspondence rajas. They were all men of ancient Hindu stock, allied to the chiefs of the Garhjât estates and some claiming royal descent from the pre-historic times; their succession was governed by the law of primogeniture, lands being assigned for the maintenance of the younger brethren, and they kept up on a smaller scale the pomp and dignity of independent chiefs. Some, as we know of the *killas* of the *Rajwara*, obtained on the British conquest recognition as tributary estates; others, as Aul, Kujang, Kanika, and Sukinda, with claims differing but little from those of the estates now dealt with, received a permanent settlement; but the eight *killas* in question were brought on to the roll of temporarily-settled estates, and their revenue was on different occasions enhanced. Dompura was, in 1829, restored to the position of a permanently-settled zamindari, provided only that in the event of any alienation the assessment should be open to revision.‡ At the last settlement the zamindars of the other *killajat* estates protested against the proposals of the Deputy Collector to treat them as ordinary *Moghulbandi* proprietors, and claimed a permanent settlement; pointing out that they had precisely similar titles to those of the *Garhjât* chieftains, and had only submitted themselves to British rule in the hope of obtaining more lenient treatment.

Their claims were fully considered by Mr. Commissioner Mills in his letter No. 790, of 21st March 1839, and, No. 2397 of the 27th October 1843, to the Honourable Board of Revenue, in which, while finding that they had no legal right to be treated otherwise than as proprietors of temporarily-settled estates, he recommended as a matter of policy that no enhancement of the revenue should be made (except in the case of *Killa Kantajhar*, which had passed by sale into the possession of the chief of Keonjhar), and the revenue previously paid was under orders of Government continued for the term of settlement.

At the commencement of the present proceedings the Bhuian of Mangalpur petitioned the Government, and orders were passed§ that specially lenient

* See letter No. 397 O.S. of 2nd October 1899, from the Commissioner of Orissa, to the Secretary to the Board of Revenue.

† See paragraph 27, Babu Runglal Banerji's report on Cuttack tenure.

‡ Board's No. 4817, of 8th September 1899.

§ No. 3497-409-2 of 14th December 1895, from Government of India, to the Government of Bengal, and No. 290 L.R., of 15th January 1896, from the Government of Bengal, to the Board of Revenue.

treatment should be accorded to these *killas*, and that they should form the subject of a special report to Government.

Kantajhar, of which the revenue was enhanced at the last settlement, has been treated as a *Mogulbandi* estate.

So also has *Killa Patna*, which quite recently passed by sale into the hands of Babu Rajnarayan Das and others. The other five *killas* have been made the subject of special reports, in which I proposed to retain the existing revenue, requiring only from the proprietors the payment of a lump sum either at once or in annual instalments to cover the cost of the settlement operations and an annual payment of 85 per cent. of the assets of the resumed *chaukidari jagir*. Alternative proposals were also made for the assessment of a light revenue based on the realisable assets, excluding the valuations of lands assigned for the support of brethren or for such other purposes as are required by the dignity of the zamindars.

In making the proposals I have been actuated by the desire to save these old families from the social degradation that would, I believe, be entailed by an enhancement of their revenue, while reserving to Government the right to enhance the revenue at any subsequent settlement or on the alienation of the property. I may add that I have included in my proposals the assessment of a full revenue at 55 per cent. of the gross assets (and 85 per cent. of the *chaukidari* resumed *jagir*) in the event of alienation of any of these *killas* from the direct heirs of the present holders.

The Collector of Cuttack, Mr. Growse, went further and expressed himself in favour of granting a permanent Settlement to these picturesque chieftains; and Mr. Commissioner Marindin,* following the precedent of Dompura, recommended that the present revenue should be fixed in perpetuity, subject only to revision in the event of the alienation of the whole or any part of the estate. This view has been accepted by the Board of Revenue.†

The following statement gives a summary of the extent and assets of these *killas* and of the different proposals:—

Name of <i>killas</i> and <i>tanze</i> number.	Name of proprietor.	Area in acres.	Number of villages.	Nominal asset.	Realisable assets.	Existing revenue.	PROPOSALS <i>ad interim</i> .			Alternative proposal for light revenue.	Revenue payable in the event of alienation.
							Cost of survey and settlement.	Chaukidari Fund.	Total proposed revenue.		
1	2	3	4	5	6	7	8	9	10	11	12
				CUTTACK.							
Balarampur	.....	15,743	26	Rs. 9,778	Rs. 4,299	Rs. 380	Rs. 203	Rs. 73	Rs. 666	Rs. 2,317 + 73†	Rs. ...
Bagri ...	Raja Upendra Narendra Mahapatra.	11,768	26	10,826	6,349	826	184	47	547	2,466 + 47§	5,818 + 47
Chausatpara	Raja Birbar Dinkor Chotra Mahapatra.	4,335	9	4,727	2,633	133	87	68	289	1,404 + 68§	2,556 + 68
				BALASORE.							
Mangalpur	Balabhadra Prasad Das.	6,398	23	5,551	4,577	1,935	220	...	1,256	1,831	2,107
	Rajkumar Barinjan Bhuian Mahapatra.										
Ambo ...	Bhuian Dwarkanath Bidyadher Mahapatra.	3,663	17	2,989	2,214	213	90	47	350	648 + 47	1,618 + 47

* Commissioner to Board of Revenue No. 397(D.S. of 2nd October 1899.

† Board to Government, No. 1319A., of 15th December 1899.

‡ *Rasadi* terms. For first five years Rs. 1,200. For the next five years Rs. 1,800. From the eleventh year till expiry of Settlement Rs. 2,317 + 73.

§ For first five years Rs. 2,000. For the next five years Rs. 2,750. From the eleventh year till expiry of Settlement Rs. 2,466 + 47.

|| For first five years Rs. 800. For the next five years Rs. 1,150. From the eleventh year till expiry of Settlement Rs. 1,404 + 68.

611. Under Board's orders No. 452A., dated the 8th November 1899, I was directed to give an account, in the completion report, of certain estates claimed as permanently-settled.

Jalapahi areas in Balasore.

Certain lands known *jalapahi* were acquired by the East India Company for the manufacture of salt in the beginning of the century under perpetual leases. As an instance of the terms of acquirement, the following extract from a lease may be quoted . . . "this land will for ever remain in the possession and title of the Company, and the Company will use it for the purpose of manufacture of salt, or cultivation, or for any other purpose it pleases." In 1811 it was written that "the talukdars had consented to relinquish in perpetuity in consideration of a fixed annual revenue being allowed to them."

This *jalapahi* area is situated in two Parganas of the Balasore District, Bhograi and Shahabunder. I deal first with the Bhograi area. It is necessary to refer to Board's letter No. 194B., dated 18th August 1871, to Government. From this letter we find that certain lands in Pargana Bhograi, in the District of Midnapore (since transferred to Balasore), were held under a permanent tenure by Government for the manufacture of salt. On the abandonment of the salt monopoly, these lands being no longer required for the purpose, their settlement with the proprietors of the estates within which they were situated was sanctioned by the Board. In the meantime portions of the lands had been leased and portions had been sold.

It appears that on the proprietor of the Bhograi estate agreeing to take back the balance of the lands which had been leased out and to receive the sale proceeds of the two *mahals* Bara Ausa and Arang-patai, which had been sold by mistake, and to a deduction being made from the *sadar jama* of the Bhograi estate equivalent to the *sadar jama* of these two *mahals*, the Collector of Balasore was instructed by the Commissioner to come to a final agreement with him on the above lines, subject to the Board's approval.

The matter was reported to the Board in Commissioner's No. 50A., dated 5th May 1871, together with a translation of the agreement which was entered into. The proposed terms were approved by the Board with some alterations (*cf.* Board's No. 114B., dated 18th August 1871, and No. 21B., dated 8th February 1872). The agreement shows the nature of the two *mahals*.

It appears, however, that these *jalapahi* lands originally belonged to estates temporarily-settled and were taken by Government on permanent lease from the proprietors. The proprietary right all along remained with the owner of the parent estates, although cultivable portions of the *jalapahi* were in some unaccountable manner treated as separate estates and leased out. Finally, the new estates (so called) were by mistake sold as "estates," but the proprietor of the parent estates objected and he received the purchase money. In the *kabuliyat* executed by the sale purchaser the property sold is described as "having become as good as a decennially (*i.e.*, permanently) settled estate."

In these circumstances, it seems clear that the two new "estates" are merely permanent tenures in estate (the parent estates), and in the case of Arang Patai, it would appear that the zamindar of the parent estate by an agreement, dated 1st November 1871, admitted that the *jama* of the tenure was fixed. Government could sell no right beyond what it possessed, *viz.*, that of a permanent tenure-holder, and the circumstance that it was sold as a permanently-settled estate (supposing this admitted) could not make it so, even though the proprietary right had vested in Government, as a permanent settlement cannot be made by the Board or the Local Government without sanction of higher authority.

Thus in Pargana Bhograi two portions of the *jalapahi* area were sold as estates before 1864. The estates are borne on revenue-roll of Balasore and are known as Arang Patai and Bara Ausa, respectively. They are now claimed as permanently-settled. As details may be required, I add the following:—

In 1864 the Board directed that all *jalapahi* lands should be restored to the estates from which they were originally separated.

The Board directed for Bhograi—(1) That the sale prices realised for Arang Patai and Bara Ausa should be paid over to the proprietor of the estate

to which the lands originally belonged. (2) Subleases of other areas of the *jalapahi* created by Government should be respected by the proprietor of the parent estate. (3) Lands necessary for embankments should be given up to Government free of cost. (4) All the estates including *jalapahi* lands should be resettled in 1275 (1867). [As the Orissa Settlement was extended to 1304 (1897), the re-settlement did not take effect till 7th September 1897.]

These terms were accepted by the Bhograi proprietors.

The *jalapahi* area of Bhograi, however, belong to two estates, *mahal* Kasba and *mahal* Nankar; 4,377·30 acres were, therefore, returned to Kasba, and 1,529·41 to Nankar. This fact was not brought to the notice of the Board, but the Board were under the impression that the whole *jalapahi* area in Pargana Bhograi belonged to *mahal* Kasba—a temporarily-settled estate—and that the whole estate (including the *jalapahi* area) would be liable to re-settlement in 1275 (1867).

The estate *mahal* Nankar in Bhograi is in my opinion also temporarily-settled. The proprietor, however, has raised an objection on this point, but it has not yet been decided by the higher revenue authorities (a report has been submitted).

It is sufficient to say here that the estate was temporarily-settled in 1841, and that Board's circular No. 6 of 1866 does not apply, as the estate is situated in the temporarily-settled district of Balasore. Accordingly, I have settled the new revenue of *mahal* Nankar and have included its *jalapahi* area within the estate.

I have had to go into some details in regard to the *jalapahi* of Bhograi to make my meaning clear, and may now turn to that of Shahabunder area.

There are many points of difference in the treatment of these *jalapahi* areas and some points of resemblance. At the last settlement the *jalapahi* areas of Bhograi were included in the areas of their two parent estates. It was further recorded that a rent of Rs. 3,712 for an *istmarari ijara* was payable to proprietors of one estate, i.e., originally the whole *jalapahi* area was recorded in that estate, but was afterwards separated and recorded in two estates, though no separation of *jama* was made (possibly because the estates belonged to the same proprietor, but probably through carelessness). In the case of Shahabunder, however, though the Collector stated in his report (dated 10th April 1849) to the Commissioner that the *jalapahi* area should be included in the unassessed area of the estate to which it belonged, the area was never so included and the proprietors of the parent estate never raised any objection.

Furthermore, they did not claim the area at a subsequent partition, but contented themselves with dividing out Rs 799 (the rent payable by Government for the *jalapahi* lands according to their shares. No lease or *kabuliyat* for the *jalapahi* lands can now be found, but Government still pays the rent, and the possession of Government since the beginning of the century and the payment of the same rent for all these years is admitted.

In 1861 Government sold to one proprietor of the partitioned estates 119 *māns*, a portion of the *jalapahi* lands in *manza* Bichitrapur, for Rs. 2,000.

The Board took exception to this sale, but I do not find that the purchase money was ever refunded to the proprietors of the parent estate.

This estate is now considered and recorded in the revenue-roll as permanently-settled estate No. 1372. In 1864 the purchase money was not refunded because the Shahabunder proprietors refused to take back the *jalapahi* lands on the Board's terms (similar to those recorded above for Bhograi).

In consequence of this refusal Government held the *jalapahi* lands *khas* till 1872, except 149 *māns* already sold. In that year they were let out on *ijara* and the same lessee has held them ever since.

His administration has won golden opinions from all Collectors and from the Board. The lease expired in November 1899.

In 1897, by Board's orders, No. 506, of 11th May 1895, 297 acres of *jalapahi* were sold for Rs. 8,300 and they now comprise *tauza* No. 1369, forming a temporarily-settled estate on the revenue roll of Balasore. In the present proceedings the balance of the area remaining with Government is 3,548 acres, and is known as the Bichitrapur Government estate. The zamindars of the parent estate claim that all lands in excess of 2,779 acres, the area mentioned as

jalupahi in the last settlement proceedings, should be returned to them. This area was not recorded correctly at the last settlement.

In 1829 it was measured as 3,595 acres. In 1835 the land was under water at the time of measurement, thus the area was only returned at 2,448; moreover, in the *stambhabundai* papers of 1848 the boundaries correspond to those of the present areas.

Whatever the area may have been, Government is without dispute in possession of it, and the proprietors of the parent estate are barred by limitation from contesting this point. They have, however, claimed the excess area in proceedings under the Survey Act. It was found by local enquiry that that possession was with the lessee of Government and that the excess area, if any, was due to accretion to the permanent tenure held by Government. Accordingly, by Mr. Kingsford's order of 13th April 1899, the whole area—3,549·14 acres—is recorded (as before) in the name of Government. This does not of course include the areas of estates No. 1372 and 1369.

The zamindars of the parent estate now wish that all the *jalupahi* area should be restored to them, notwithstanding the fact that in 1864 they refused to take over the lands. They have seen that the lessee of Government is making a good profit out of the lease, and that he has expended capital and labour on reclamation. Naturally they repent themselves of their previous decision, and would like now to take the profits. I submit that to give up the lands now to the zamindars would be very unjust to the lessee Babu Kailash Chunder Rai Mahashai (please see Mr. Commissioner Smith's No. 1807 of 26th November 1878), the lessee, has a reasonable expectation of renewal and has thoroughly deserved to have the lease settled with him for another term of years. He has behaved very honestly throughout. (See Board's No. 171A of 25th May 1880 and Mr. Smith's letter above referred to.)

Several points arise for decision—

(1) Government is not the proprietor of the so-called Bichitrapur Government estate, but is a permanent tenure holder. "The zamindars are entitled to continue "to receive their rent, but have no further claim" (Mr. Smith's letter).

I beg to recommend, therefore, that the zamindars of the parent estate be recorded as the proprietors of estate *mauza* Bichitrapur, Pargana Shahabunder, tauzi No. 1370, and that Government be recorded as permanent tenure-holder paying quit-rent in perpetuity.

(2) The zamindars wish to have the rent Rs. 799) raised. I venture to suggest that Government can prove payment of the same rent since the beginning of the century, and though neither *pattu* nor *kabuliyat* can be produced, we can show the *pattas* taken for the Bhograi *jalupahi*, the terms of which are set forth in paragraph 3 above. Government should decline to consider any application for enhanced rent, and should refer the proprietor for redress to the Civil Court.

(3) There remains for decision the question whether the purchase money of estates Nos. 1372 and 1369 should be refunded to the proprietors of the parent estate or not. Government has not the proprietary right and has never had it. In reality Government has made sub-leases of portions of its permanent tenure, but the deeds purport to confer a proprietary right. I would suggest that the purchase money of both estates be offered to the zamindars of the Shahabunder estate, even though it is nearly forty years since one estate was sold (*i.e.*, in 1861). As four sales of this kind have now been made, perhaps the attention of the Collector of Balasore might be directed to the position of Government in respect of the *jalupahi* lands.

(4) The orders which are passed in regard to Arang Patai and Bara Ausa by Board's No. 452A., of 8th November 1899, are reproduced as follows:—

I am directed to say that the Board are of opinion that both Arang Patai and Bara Ausa should be treated as permanently-settled estates. I am also to request that the Settlement Officer may be instructed to specially notice these (and other such) cases in his final report, so that the Government of India may interfere if they choose.

In accordance with these orders, I have tried to give information sufficient for the higher authorities to deal also with Nos. 1372 and 1369, and with No. 1370. the so-called Government estate.*

612. One of the most curious estates in the Province of Orissa is the revenue-free property known as the *Satais Hazari mahal*, which is made up of villages and shares of villages and money assignments in Puri District and elsewhere.

After the Mahratta conquest of Orissa, the Raja of Khurda was forced to surrender to them, in lieu of payment for military services, the parganas of Rahang, Serai, Chaubiskud, and Lombai, forming a part of the lands excluded from the Mogul settlement.

Out of these, for the support of the temple of Jagannath at Puri, the Mahrattas assigned the revenues of certain lands, making good from the public treasury the annual deficit. This endowment the British Government recognised, and further undertook the management of the temple and the payment of the expenses connected with it, which, in the early years of our rule, averaged Rs. 65,995 (Sicca) per annum. Down to 1808 the average payments from the public treasury amounted to Rs. 29,356 * per annum over and above the income of Rs. 30,885 derived from the *Satais Hazari mahal*.

In that year the Collector, Mr. Webb, proposed to disallow some of the unnecessary charges and to fix a limit to the expenditure, and the Government accordingly limited the expenditure on the temple to the sum of Rs. 56,343 exclusive of broad cloth, which was to be supplied from the Company's warehouses.

In 1843 the Government withdrew from the management of the estate and made it over to the Raja of Puri, who had been appointed Superintendent of the Temple. The allowance from the public treasury was, however, continued on a reduced scale down to 1858, when, yielding to the pressure from religious-minded persons in England, Government finally severed its connection with the temple, and, in lieu of the money payments, assigned to it a portion of the Khurda Government estate with a revenue of Rs. 16,827, which in 1863 was supplemented by a further grant of land with a revenue of Rs. 6,889, these two grants being commonly known as the *Ekhrajat Mahal* †. An account of the *Ekhrajat Mahal* is given in the next paragraph.

The revenue of the *Satais Hazari Mahal* is derived from the following sources:—

- (i) twelve *hastabud* villages in Parganas Rahang and Chaubiskud Lombai and Paschimduai, with a former rent of Rs. 12,600.
- (ii) Fifty *bahal tanki* villages and portions of villages with a total rental of Rs. 2,015.
- (iii) Certain allotments from eight *tanki bahal* villages in the Rahang estate with a money assignment of Rs. 2,498.
- (iv) Certain allotments from ten *tanki bazyasti* villages in the Rahang estate with a total money assignment of Rs. 2,824.
- (v) Certain allotments from eight *Sarbarakari* and *mustajari* villages in the Rahang estate with a total money assignment of Rs. 270.
- (vi) Two *muqadumi* villages in Dalijora, district Cuttack, with a rental of Rs. 380.
- (vii) One village in Asureswar, district Cuttack, with a rental of Rs. 80.
- (viii) Lands in *killa* Daspalla to the value of Rs. 240, out of which timber for the car is supplied.

The total revenue prior to the present settlement proceedings was, therefore, Rs. 18,178.

Lands in classes (i) and (ii) were at first surveyed and *khanapuried* along with the temporarily-settled estates of the District, but the completion of the record was postponed owing to pressure of work. Eventually under orders of Government ‡ the attestation and completion of the records was taken up by Babu Sudarsan Das in the season of 1898-99.

In all the *hastabud* villages [class (i)], except Suanlo, which had suffered from breaches in the bank of the Daya river, the Raja of Puri applied for enhancement of rents by annas 3⁰⁰ per rupee on the ground of rise in prices and

* Mr. Collector Webb's letter to Commissioner, dated 16th November 1808.

† That is lands assigned for expenses.

‡ Government order No. 474T.—B., dated 30th June 1898.

for assessment of excess area. The settlement was entrusted to Babu Sudarman Das, and the result of the applications was as follows:—

Class of tenure.	Number.	Area in acres.	Existing rent.	Settled rent.	Increase per cent.
			Rs.	Rs.	Rs.
<i>Padhani tanki</i> ...	70	90	48	84	77
Occupany raiyats ...	2,020	5,149	11,254	14,981	33
<i>Chaukidar's jagir</i> ...	2	2	Nil	5	...
<i>Sarbarakar dia niekar</i> ...	32	29	Nil	73	...
Total	2,124	5,270	11,302	15,143	34

All other rents in the *hastabud* and *tanki bahal* portions remain unaltered.

The villages of Rahang taluk from which the *Satais Hazari* estate is entitled to receive assignments, have been attested and rents settled as part of the general settlement of Orissa.

Rents in the *tanki bazyasti* and *sarbarakari* villages have been enhanced, but the Raja of Puri is not entitled to claim any part of the enhancement, as will appear from the following order of Mr. Commissioner Mills* passed on a reference by the Collector of Puri as to the fixity of the assignments to the *Satais Hazari mahal*:—

"Those lands will be made the subject of investigation, but the *fixed assignment* which they pay to the *Satais Hazari mahal* must be maintained as an asset of that estate and deducted from the gross assets of the lands."

The assignments have not been altered since they were first fixed, and will not now be increased unless Government pass orders to the contrary. The *tankidars* of villages Bhimpur, Protaprapur, Chandanpur, Birkishoripur and Balbhadrapur pay jointly the amount of the assignment to the Raja of Puri; in other *sasans* collections are made from individual *tankidars*. *Sarbarakars* and *mustajirs* pay the amounts with which their villages are charged direct to the Raja. The present settlement will not affect the system of payment, except in the *bazyasti* villages in which the rents of each *tankidar* have been separately enhanced and settled without specifying the amount to be paid respectively to the Rahang and *Satais Hazari* estates. We have, however, no orders to direct the *tankidars* to pay as assignment any larger sums than they have hitherto paid. I understand from the zamindar of Rahang that the Raja of Puri is collecting direct the money assigned to the *Satais Hazari*; but pending Government orders, no increase of the assignment can be collected, and the Collector should be asked to prevent any increase being collected. Babu A. K. Sen, in his report on Rahang, has expressed an opinion that, to save confusion, it will be necessary to farm out the villages, leaving the farmer to pay the assignment to the Raja or else to assign to the *Satais Hazari* the rents of specific *tankidars*.

Farming is to be deprecated except as a last resource. The simplest method of all, and one which the proprietor of Rahang wishes, is to let him collect the assignment fund and pay it into Government as revenue with the rest of the revenue of his taluk. Government can then make over the assignment to the Raja. The alternative is a *batwara*. There is no evidence in any papers of any separation of shares or lands; a *batwara* would therefore be a very difficult and expensive operation.

The villages of Dalijora and Asureswar were attested along with the temporarily settled villages of Cuttack, and no settlement of rent has been made in them. The lands in Daspalla lie outside the area in which the rent laws and regulations are in force and have not been touched.

No attempt has been made (nor would it be possible to do it accurately) to calculate the cost of the preparation of the record-of-rights in this estate, as it forms part of the general settlement operations. The settlement of rents, however, was made on the application of the Raja and is to be paid for by him.

* Letter No. 519, dated 5th March 1848.

The account stands as follows:—

	Rs.
Pay of Assistant Settlement Officer and his establishment	638
Cost of forms	42
Total expenditure	680
Receipts in Court fees	1,112
Deposit in cash	42
Total	1,154

The stamps fully cover the expenditure incurred, and there is, therefore, no need for any further adjustment. Hitherto the estate has been very badly managed. The Raja of Puri has been a mere puppet in the hands of his advisers, and the management has been left to the *tahsildar* and his *gomdasths*. There are long lists of arrears and in the *mustajiri* village of Kanchi the assignment of Rs. 65-13 has not been paid for twenty years. A year ago the Raja appointed as his manager Mr. J. C. Price, a retired Indian Civilian, and this gentleman has been doing his best to put matters on a better footing *.

613. The history of the *ekhrājāt māhāl* is interesting. After the conquest of Khurda in 1804, Government continued to make certain cash payments to the Puri Temple, which was held in high respect by the Hindu communities throughout India. In 1858, in deference to very strongly expressed views in England that the Government should divest itself of all connection with religious endowments in this country, it was decided to grant certain lands in lieu of cash payments.

Accordingly, on completion of the *Nayābādī* settlement of Khurda, a portion of the estate, yielding an annual sum equal in amount to that of the reduced money allowance made by Government to the Superintendent of the Temple of Jagannath was transferred to him as *ekhrājāt*† under a deed dated 3rd April 1858.

The amount of money allowance was Rs. 16,517 and the *sadar jama* of the *mahals* transferred was Rs. 16,827, as follows:—

	Rs.
The whole of <i>zilla</i> Tapang	14,327
Garh Parichhal, <i>zilla</i> Rameswar	1,612
„ Mantir, <i>zilla</i> Do.	740
„ Muazib, Madhupur, &c.	148
Total	16,827

The excess revenue of Rs. 310 odd was handed over to cover collection charges and remissions for loss of crops.

By a second deed, dated the 13th March 1863, some more villages of *Zilla* Rameswar paying a *sadar jama* of Rs. 6,889 were transferred in lieu of Rs. 6,804 paid by Government for the salaries of the Temple *barkandas*‡ or guard. We have ascertained (see column 6 of the statement near the end of this paragraph that the assets were actually found to be worth Rs. 26,342 instead of Rs. 23,716-3-9½§).

The *mahāl* comprises the whole of *zilla* Tapang and 51 villages of *zilla* Rameswar. It is well to note that two villages of *zilla* Tapang lie within the geographical boundaries of Pargana Serai, and fifteen villages of the same *zilla* lie within Pargana Lembai. Despite their detached geographical situation outside *zilla* Tapang, these

* Since the above was written, Mr. Price has left the Raja's service.

† *Ekhrājāt*, or more properly *Ikhrājāt*, is an Arabic word meaning "expenses."

‡ See paragraphs 101 to 110, Vol. II, of Khurda Selections.

§ Both Parganas are situated in the Sadar Subdivision of Puri.

villages are, for all fiscal purposes, considered as parts of *zilla* Tapang. At the settlement of 1880, the number of villages was shown as 151, but some of these have merged together, and in the present survey they have been measured as 124 villages.

The present area of this *mahal* is 67,520 acres, including *lakhiraj bahal* and Government land.

At Mr. W. C. Taylor's survey, the area was 67,685, and at the survey of 1837, it was 53,804 acres. The difference between that area and the present survey area is due to the inaccuracy of the former. The *lakhiraj bahal* area is now 733 acres as against 767 acres at last settlement. The present area of Government land is 438 acres, consisting principally of roads and the East Coast Railway passing through the *mahal*.

The soil is for the most part laterite, or contains laterite, but it is not on this account the less fertile, and will compare very favourably with the alluvial soil of many other parts of Orissa.

In 1823, Mr. Wilkinson found extensive tracts lying waste covered by jungle in *zillas* Tapang and Rameswar. At the time of the last settlement, in 1857, only 24,925 acres were cultivated; now the cultivated area has risen to 32,381 acres, *i.e.*, there has been an increase of 30 per cent. Even so more than half of the estate is still unbroken by the plough. Much of it is too high and rocky ever to be cultivated, but there is still a large margin which should repay the labour and expense of reclamation, and now that the country has been opened up by the railway, a considerable development may be expected.

The principal crop grown by the tenants is paddy, chiefly *sarad*. *Biali* and *dalu* are grown in a few villages where the tenants have appreciated the benefit of these crops; and on the high lands and homesteads *mundia*, *kulthi* and other miscellaneous crops are found. The orchards are very extensive and consist chiefly of mango and *pulang* (Alexandrian laurel) trees.

As this estate formed a part of Khurda, the early history of its previous settlements is included in that of the Khurda *khás máhál*.

Previous Settlement.

From the conquest of the Province in 1804 down to 1837 there were five successive settlements, the dates of which are noted below:—

Settlement Officer.			Year in which made
1. Major Fletcher	...	...	1814
2. Golam Kadir	...	...	1806-1817
3. Mr. Trower	}	...	1818-1821
Mr. Forester			
4. Mr. Wilkinson	...	...	1822-1823
5. Mr. Wilkinson	...	...	1824-1836

The assets of the estate at these settlements were included in the gross assets of the *khás máhál*, from which it had not then been separated.

Mr. Wilkinson's settlement of 1837 was the first attempt, on a large scale, to prepare a record-of-rights and to settle rents by soil classification.

Each raiyat's holding was measured, rates were fixed, and enquiries were instituted into invalid tenures.

In 1857 a *nayabádi* settlement was effected, in course of which only the new cultivation was assessed.

In Mr. W. C. Taylor's settlement of 1880 these lands were surveyed with the rest of Khurda, and proposals were submitted to the Supreme Government asking for sanction to re-amalgamate them with the *khás máhál* and to substitute an equivalent annual income to the Raja of Puri by means of investment in Government paper or in the shape of a book-debt. The Government of India did not think it desirable to re-open the previous settlement of this question, and paragraph 12 of the Government Resolution (printed in page 192, Volume II, of Khurda Selections) directed that, in accordance with the views of the Supreme Government, the Temple lands should be entirely excluded from the settlement proceedings. The proposals for the re-settlement of these lands were therefore abandoned, and this present settlement is resumed after the *Nayabadi* settlement of 1857.

In 1891, the Superintendent of the Puri Temple applied for the Survey of the Temple lands, and the Commissioner recommended that the work should be taken up under section 101, sub-section (2), of the Bengal Tenancy Act. These proposals were sanctioned by Government in their letter No. 161A., dated 22nd February 1892, and an experimental survey was made to test the accuracy of the maps prepared in 1880. The result was satisfactory, and the estate was surveyed and *khanpuried* in the season of 1893-94 at a cost of Rs. 6,756. Attestation was begun in 1894-95 by Mr. Ambica Charan Sen, and in the two following seasons was completed, all but twelve villages, by Babus Jatendra Mohan Sinha and Amrita Lal Gupta at a cost of Rs. 7,732.

Work was then suspended for want of money (i.e., the Superintendent did not deposit costs), but was resumed in November 1898, when Babu Jagannath Dutta was deputed to complete the records and dispose of the applications for settlement of fair rents.

It was found necessary to completely re-attest the records before publication, and the work proved much heavier than had been anticipated, and in a few villages considerable opposition was encountered.

In April 1899 a second officer, Babu Balmakund Kanungo, was deputed to assist, and by May the attestation had been finished; copying and final publication were pushed on as fast as possible, and from June applications for settlement of fair rents began to come in and were disposed by October.

There had been no detailed settlement since 1857, and in the interval the interests of the temple had been shamefully neglected. Rents had been hardly enhanced at all, and farmers and *sarbarakars* had taken to themselves nearly all the profits of new cultivation. The rise in prices was found to justify a considerable enhancement of rents, and there was also a large extent of assessable excess lands in the holdings.

The Manager agreed to apply only for an enhancement of annas 3 per rupee on the ground of rise in prices, and a further assessment at light rates (As. 14-10 and As. 8-4 per acre) for excess area, an allowance of 10 per cent. being given for errors in measurement. He also applied for the resumption of a good many rent-free homestead lands and of some *jagirs*, the holders of which had ceased to render service. In the first month he omitted all tenants whose rents would at these rates be enhanced by less than 4 annas, but in subsequent months the applications were more general. Altogether, 14,523 applications were filed by the landlord and 103 by the tenants, and with a very few exceptions the fair rents proposed were accepted by the opposite party. At the outset the standard of measurement presented a difficulty. The *padika* was one of 14 *dastias*, but there was a dispute as to its length. I personally enquired into the dispute and found the length to be 7 feet, as in the *khas mahal*, and this decision was not questioned by either party.

The next difficulty that arose was over the assessment of orchards, which had in general been planted by the tenantry without the permission of the landlord and had in no case been assessed to rent. It was decided that, except where the lands were required for communal or public purposes, such as a market, they should be settled with the tenants as occupancy or non-occupancy raiyats and assessed at not more than As. 8-4 per acre, the lowest *khas mahal* rate. It was only in the well-to-do neighbourhood of Bajpur that serious opposition was encountered, and it became necessary for me to go there myself and explain to the tenants the grounds of the enhancements. By absenting themselves from the attestation the raiyats had allowed many wrong entries to pass unchecked, and as a return for their acquiescence in our proceedings they were allowed a further opportunity of having all objections disposed of. As the result of these measures, the opposition gave way and no further check to the work occurred.

In spite, however, of the liberal rules, the early enhancements worked out so high that it was found necessary to reduce them, the rates of assessment on excess area and orchards being summarily lowered where enhancements were highest. Mr. Webster was deputed to examine the records and make a note of all cases of excessive enhancement, and, after some demur, the temple authorities agreed to the proposed reductions.

The following table shows the result of the Settlement operations in the *ekhrajat mahals*:—

Statement showing the last and present Settlement area and assets and incidence per acre.

Serial number.	Status.	Number of tenants.	AREA IN ACRES.		RENT, RUPEES.							RATE PER ACRE.		
			According to last settlement.	According to present settlement.	Last settlement.	Existing.	Present.			Difference + or -		Past.	Existing.	Present.
							Settled rents for which applications have been made.	Existing rents for which applications have not been made.	Total.	Column 7-4.	Column 10-7.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	<i>Bahal Tanki</i>	166	238	227	95	94	18	29	94	-1	...	Rs. A. P.	Rs. A. P.	Rs. A. P.
2	<i>Raf's Tanki</i>	1,778	4,836	3,790	2,211	2,005	1,788	623	2,231	+248	+248	0 6 5	0 6 8	0 6 8
3	Settled and occu- pied.	17,708	20,049	27,643	21,761	20,658	23,515	4,907	23,122	+3,907	+7,464	1 0 11	0 14 10	1 3 2
4	Non-occupancy	40	...	35	18	24	8	32	32	+18	+14	...	0 8 9	0 14 8
5	<i>Chandina</i>	1,047	190	35	2,282	813	484	546	244	-1,469	+171	12 0 2	8 8 11	10 5 9
6	<i>Jagir amomed</i>	173	...	53	...	...	...	...	...	+355	+355	...	...	1 3 0
7	<i>Minka</i>	212	...	39	...	...	182	...	182	+182	+182	...	...	8 9 4
8	<i>Rairat</i>	111	...	...	...	12	161	6	167	+12	+176	...	...	...
	Total	21,512	25,364	32,373	26,342	25,600	31,575	5,919	37,497	+2,258	+8,887	...	...	...

It will be seen that in forty years the *mufassal* rent-roll had only been increased by Rs. 2,258, or about 9 per cent., while in this settlement another Rs. 8,887, or 31 per cent., has been added.

This may appear a large increase, but it is certain that the tenants have actually been paying to *sarburdkars* and farmers rents for a good deal of what is shown in our papers as *naydabali*, and the incidence of settled rents is Rs. 1-3-2 per acre, as against Rs. 1-10-4 in the *khas mahál* of Khurda.

The total cost of the operations and the amount recovered from the proprietor has been:—

	Rs.
Survey and <i>khanapuri</i> ...	7,126
Attestation ...	15,144
Copying ...	1,762
Fair rent settlement ...	4,622
Head office establishment	1,394
Miscellaneous ...	1,023
Total ...	31,073
Deduct amount realised by Court-fees	10,904
Balance of cost debitable to the settlement operations ...	20,170
Deduct amount already deposited by the landlord ...	17,300
Balance due to Government ...	2,870

There does not appear to be any reason why Government or the tenants should contribute towards this expenditure. Not only will the enhancements recoup the Raja in four years, but he has been supplied with a complete and authoritative account of his property and his assets, which for at least thirty years should enable him to prevent his *sheristá* falling back into the state of confusion that has hitherto prevailed in it.

614. Along with the *ekhrájat* villages were settled the revenue-free and *khândditi* villages of Khurda, viz., (1) Garh Atri Oger, (2) Mauza Sana Kumari, (3) Mauza Kapiles-war, (4) Mauza Baunsmul, (5) Mauza Darunguli Patna, (6) Garh Haldia, (7) Garh Malipara, (8) Mauza Uparbast, (9) Mauza Bhubaneswar. These require but a very brief mention.

Atri consists of five villages in *silla* Kuspalla with a total area of 2,309 acres. They were granted in 1858 to the *mathadharies* of the Puri temple in lieu of a former allowance of 560 maunds and 3 seers of salt, and have up to date been held free of revenue.*

The survey was made in November 1898 and the records prepared at the instance and at the cost of Government. The proprietor, as well as some tenants, filed applications for settlement of fair rents, 710 in all.

The result of these applications was that rents were raised from Rs. 1,056 to Rs. 1,502, or by 46 per cent., on the same lines as rents had been enhanced in the *skhrajats*. Adding rents in respect of which no application was filed, the rent-roll of the estate comes to Rs. 1,840.

The estimated cost of the operations was Rs. 938, of which Rs. 410 was filed in court-fee stamps. There is nothing to be recovered, as the stamps cover the cost of settlement of rents.

Sanakumari, Kapileswar, and Baunsmul are small revenue-free endowments, surveyed and settled as part of the general operations. The following table sums up the general facts regarding them:—

Village.	Area in acres.	Former assets.	Settled assets.	Cost of operations.	Recoveries.	Balance.
		Rs.	Rs.	Rs.	Rs.	Rs.
Sanakumari	... 62	93	114	115	83	82
Kapileswar	... 37	22	22	117	Nil	117
Baunsmul	... 81	187	187	92	Nil	92

Applications for settlement of rent were only made in Sanakumari, and the proceedings have been paid for by court-fees.

615. Haldia and Malipara are two *khandaiti* tenures held at a fixed quit rent, from before the conquest † and were recognised by the British Government in 1819. The *khandaits* do not render any service to Government, but regard themselves almost as tributary chiefs, and many of the peculiar customs of the *killajats* estates are found among them in full force.

By Mr. Wilkinson these tenures were surveyed and settled, but in 1880 operations were stopped after the survey. In this settlement they were taken up in order to complete the Khurda *killa* and the survey and record-of-rights were made at the cost of Government.

Much trouble was caused in Haldia owing to disputes between the *khandait* and his brethren as to their rights to the jungle and waste land, and the claims of the latter party to be recorded as co-sharers in the estate. The property was divided at Mr. Wilkinson's settlement into three parts: *nijjat*, or lands in the possession of the *khandait* himself; *bhaiyabhag*, lands by relations (*bhaiya*) for their maintenance; and *kotbhag*, the residue. It is the rights over this latter portion which have formed the subject of dispute, and it has been held that the '*bhaiyas*' have no title except to graze their cattle on and take fuel from the waste lands and jungle. A curious feature of some of the tenures in the *bhaiyabhag* is that part only of the rent is payable to the assignee and the rest to the *khandait*.

The whole cost of settlement has been borne by Government and no applications filed for settlement of rents.

The following table summarises the principal facts:—

Garh.	Number of villages.	AREA IN ACRES.		Number of tenants.	Rental.	Cost of operations.
		Former Settlement.	Present Settlement.			
Haldia	... 5	5,130	4,984	1,984	Rs. 1,602	Rs. 1,438
Malipara	... 5	5,237	4,725	1,099	928	828
Total	... 10	10,367	9,713	3,083	2,530	2,261

The loss of area is due to the decision of a boundary dispute with Domparsa after the survey of 1880.

* Board to Commissioner, No. 185 A of 31st May 1880.

† Vide pages 44 to 56, Volume III of Khurda Selections.

616. **Mauza Uparbast** is a small revenue-free property of 371 acres. In

1896 the proprietor applied for a survey and the preparation of a record-of-rights. The work was carried out in 1898 by Babu Jagganath Dutt, who also settled rents for 218 tenants, an enhancement of $3\frac{1}{4}$ annas per rupee being made on the ground of rise in prices. Assets were thus raised from Rs. 274 to Rs. 397, or by 45 per cent. The cost of the operations has been Rs. 390, the whole of which has been borne by the proprietor * and the balance of his deposit is to be refunded under Board's order No. 405 A., of 13th December 1899.

617. The temples of Bhubaneswar are sacred to the worship of Lingraj

Mahaprabhu, and are said by Mr. Sen to owe their origin to the Kama Brahmins (see also chapter of this report). They are supported by an endowment consisting of eight villages in the Khurda subdivision of the Puri District, besides several small holdings scattered over adjacent Thanas. These lands are under the control of a Committee, of which Babu Priyanath Chatterji, M.A., B.L., is the managing member.

In Mr. Wilkinson's settlement of 1837, but not since then, a detailed survey had been made of the property, and on the 25th September 1897 the Committee applied under Section 103 of the Bengal Tenancy Act for a survey and preparation of a record-of-rights. The Settlement was sanctioned by the Board of Revenue, and the work was taken up under the general notification for the survey and settlement of Khurda.

The villages in respect of which the application was made were eight in number, viz :—

Serial No.	Name of village.	General number in collector's Register B. Part I.	Area (including waste) acres.
1	Bhubaneswar	1371 to 1376	1,176
2	Mahabir sasun	1370	
3	Ogaruan	1367	913
4	Dakshin Nuagaon	6357	
5	Kuha ...	1353	145
6	Khetrupal		166
7	Sundarpada	1354 to 1364	262
8	Gangeswar	1339	77

Of these the last four contain also lands of the Khurda *kahas mahal*, and the record-of-rights was completed in 1897 at the cost of Government. For the remainder the Committee deposited Rs. 1,600, and the work was taken up along with that of the *ekhranjat mahal*. There was a good deal of trouble caused by the claims of *shebaitis* and other hangers-on of the temple to hold lands at quit rents or rent-free, and even now some cases in Bhubaneswar village remain for disposal.

So far, the result of the settlement has been to raise the rent-roll of these four villages from Rs. 1,122 to Rs. 1,543, the increase being due partly to the enhancement of former raiyati rents by three annas in the rupee, and partly to the assessment of lands hitherto held free of rent. The total rental of the endowment, as at present ascertained, is Rs. 2,309 assessed on 1,747 acres and a produce rent from 34 acres.

618. **Jamuna Jharpara** is a small *khandaiti jagir*, of which the settlement was undertaken at the request of the tenants. It has a total area of 494 acres, and the settlement cost Rs. 511, or deducting process fees, Rs. 487. Out of this Rs. 38 has been paid by the raiyats, and proposals for the recovery of the balance have been formulated. †

619. Though, perhaps, it would have more properly found a place in an earlier section of this report, I cannot finish this chapter without some mention of the peculiar treatment of *jalkar mahals* or fishery estates at the last settlement.

Sometimes the right of fishery was completely diverted from that in the riverbed or riparian estates. The most noteworthy instance is that of the two *jalkar mahals*, Gangahar Jalkar Nadi and Nadi Nanpal, which consist of the fishery rights

* Board's letter No. 405A., dated 13th December 1899.

† See correspondence ending with letter No. 645, of 18th March 1899, from the Settlement Officer to the Collector of Puri.

in the waters of the Burabalang Gangabar Shuna, and Khandia Shuna rivers in Balasore, though the river bed was included at the last settlement in the area of the riparian estates.

Another case is to be found in the fisheries of the upper Mahanadi, nearly the whole being assigned to Pargana Panikhand, though the bed of the river is included in *killas* Atgarh and Motri and Patia. Similar anomalies are to be found in the record of the Katjuri fisheries, and have led to many boundary disputes. Sometimes a river was treated as a village, as in the case of the Gobri in Pargana Tikan, of which the area and fishery assets were divided between the two principal estates. Such villages have generally been eliminated in the present survey, and the area of the river included in that of the riparian villages; some however, as the *Mahanadi Mackhadiya*, still survive.

There is still another *jalkar mahal* in Cuttack "Pata Mahanadi" No. 2845. It was purchased from Government by the Raja of Dompura and has been settled with him at a revenue of Rs. 2-0. The Collector should be directed to enquire into the circumstances of this estate.

620. It was at one time suggested that the beds of all navigable river, should be excluded from the estates through which they lay and recorded in the name of Government. Enquiry showed that at the last settlement all river beds had been included in the area of estates, and further that the channels within the temporarily-settled parganas were not of much value. The proposals were, therefore, after consulting the Advocate-General, dropped as regards Cuttack and Puri. In Balasore, Mr. Kingsford, with the proprietors' consent, recorded in the name of Government the navigable channels, that of the Burabalang excepted.*

CHAPTER XXV.

EXPENDITURE ON SURVEY AND SETTLEMENT.

621. The important subject of expenditure must here be treated of somewhat briefly as the accounts have not been finally audited.

The expenditure shown in this Chapter is therefore taken from the annual reports, and includes all payments up to the 1st January 1900.

622. The first detailed estimate of cost is to be found in a note prepared by the Director of Land Records in February 1891.†

In that note (paragraph 23) a provisional estimate of Rs. 13,07,809, viz., Rs. 6,12,747 for survey and Rs. 6,95,062 for settlement, was made against a previously sanctioned estimate of Rs. 14,03,981. It was not long before it became evident that this estimate must be largely exceeded, but it does not appear to have been foreseen by anyone that the total expenditure would be more than 30 lakhs of rupees. Comparing the original estimate with the actual expenditure up to the 1st January 1900, we find—

		Survey.	Settlement.	Total.
Estimate ...	...	6,12,747	6,95,062	13,07,809
Actual ...	...	9,43,091	23,45,426	32,88,517

Thus the original estimate for survey was a little more than half, and that for settlement rather less than a third, of the actual cost.

To some extent the difference is due to operations not included in the original estimate, viz:—

Nature of operations not included in the original estimates.	Survey expenditure.	Settlement expenditure.
Settlement of—		
Khurda		1,40,306
Ekharajati	7,126	30,584
Killa Aul	8,519	
Killa Darp	10,635	21,270
Killa Madhapur	9,075	19,253
Total	35,355	2,11,413

* Board to Government, No. 207A of 25th April 1893 and Director of Land Records to Settlement Officer, Orissa, No. 1591 S. of 30th August 1893.

† Appendix A (1).

On these accounts an allowance of Rs. 2,46,768 is to be made in the errors of the original estimate, but this still leaves a very great excess, which appears to be due in part to the defects in the early *khanapuri* and attestation, and partly to the failure to work out and carry through from the beginning a definite plan, but chiefly to the fact that the original estimate made practically no allowance for the cost of the later stages of the work; for the disposal of case work, for the completion and copying of the records, and for the settlement of revenue for over 6,000 estates; in fact, for the stages which have occupied the Settlement Department for the last two-and-a-half years.

623. The expenditure on survey (excluding revision survey in Cuttack and Khurda) is shown by the Surveyor-General to have been Rs. 9,19,955, of which details are given in the following statement:—

Statement showing the cost of cadastral survey in Orissa.

DISTRICT.	Season of survey.	COST, IN RUPEES, OF—					Total.	REMARKS.
		Traversing.	Demarcation.	Cadastral survey.	Record-writing.	Badar correction.		
1	2	3	4	5	6	7	8	9
Puri ...	1889-95...	64,904	.....	1,26,815	83,158	.....	2,24,377	Exclusive of Rs. 2,807, expended on standard maps and Rs. 4,862 expended on 2-inch topographical survey.
Cuttack ...	1889-95...	64,843	1,220	2,11,936	1,01,326	.....	4,09,325	Exclusive of Rs. 2,304 expended on standard maps and Rs. 18,602 expended on 2-inch topographical survey.
Balasore ...	1890-95...	64,164	2,027	1,53,515	54,787	.....	2,74,493	Exclusive of Rs. 5,603 expended on 2 inch topographical survey.
Orissa and Khurda...	1896-1900	.....	.....	... ..	.....	11,760	11,760	
Total ...	.....	2,28,911	3,247	4,91,766	1,89,271	11,760	9,19,955	

N.B.—The figures in this statement are exclusive of the cost of revision of Cuttack Irrigation Survey of 1878-79 (Rs. 23,146) and of 4 per cent. for the cost of instruments.

Deducting Rs. 35,355, the cost of survey in the *Ekhrajats*, Aul, Darpan, and Madhupur, and adding Rs. 23,146 for revision survey in Cuttack, the cost of survey of the temporarily-settled and revenue-free lands in Cuttack, Balasore, and Puri *sadar* is Rs. 9,07,746.

The area surveyed for this sum is about 4,797 square miles, giving an average cost of Rs. 181 per square mile for the cadastrally-surveyed area.

624. The total expenditure from the beginning of the operations up to date is shown in the returns as Rs. 23,45,426. This includes all actual disbursements, but there still remain to be added certain charges on account of supervision, pension charges, cost of tents, forms and stationery, that cannot at present be calculated. Some deductions, too, may be hereafter made on account of process and other fees received and paid into the treasury, for the proceeds of sales of old stationery and furniture, and for court-fee stamps. With this proviso I proceed to show on what account the expenditure has been incurred; and first as to the division by local areas.

Besides the settlement of the temporarily-settled Parganas, the above figure includes the cost of the settlement of the Khurda *khas nahal* which has formed the subject of a separate report; of the temple or *ekhrajat* lands in Puri, which has been made at the cost of the Superintendent of the Temple; of Aul and Darpan, which have been made partly at the expense of Government and partly at that of the proprietors, the question of the ultimate division of the cost being

still under consideration; of the small village of Uparbat, paid for by the proprietor; and of Jamuna Jharpara, which is to be paid for by the landlord or tenants; and also of the Ward's estate of Mudhupur, paid for by the Court of Wards; as well as of the revenue-free and *khandaiti* villages within the subdivision of Khurda.

These items are, however, shown separately, and I have calculated the cost of settlement in the Puri and Balasore Districts, basing my estimates on the figures supplied by Mr. H. McPherson and Mr. Kingsford. These figures were really too low, for they did not include the proportionate share of the expenditure of the head office in Cuttack, for which about half a lakh has been added to either district, a corresponding deduction being made from the Cuttack figures:—

YEAR.	Cuttack	Puri	Khurda	Balasore	Khrajat	Aul and Darpan.	Medhupur.	Uparbat and Jamuna Jharpara.	Bhubaneswar and revenue-free and khandaiti villages of Puri	Total
1	2	3	4	5	6	7	8	9	10	11
Up to 31st September 1891	Rs. 11,307	Rs. 15,972	Rs. 530	Rs. 277	Rs. 2,376	Rs. 1,846	Rs. 8,780	Rs. 1,103	Rs. 3,026	Rs. 44,000
1891-92	4,420	1,51,031	27,421	3,002	7,760	1,846	8,780	1,103	3,026	2,04,053
1892-93	1,42,007	7,504	3,002	3,002	3,373	1,846	8,780	1,103	3,026	1,47,000
1893-94	1,94,779	145	3,002	3,002	3,373	1,846	8,780	1,103	3,026	1,97,000
1894-95	1,06,783	145	3,002	3,002	3,373	1,846	8,780	1,103	3,026	1,07,000
1895-96	1,40,740	54,402	1,000	1,000	3,373	1,846	8,780	1,103	3,026	1,41,000
1896-97	32,916	60,000	2,303	1,000	3,373	1,846	8,780	1,103	3,026	3,24,000
1897-98	1,00,210	15,000	1,775	60,000	3,373	1,846	8,780	1,103	3,026	3,70,000
1898-99	1,00,000	15,000	1,775	60,000	3,373	1,846	8,780	1,103	3,026	3,70,000
1899-1900 January	27,410	0.00	0.00	0.00	3,373	1,846	8,780	1,103	3,026	37,000
Total	11,73,707	4,16,800	1,40,300	5,79,500	20,500	21,270	19,220	866	3,926	23,45,426
Adjusting cost of supervision	10,71,707	4,00,000	1,40,300	5,65,500	20,500	21,270	19,220	866	3,926	23,45,426

625. The total cost may approximately, as regards the stages of the work in the temporarily-settled areas, be divided as follows over the three districts:—

	Cuttack	Puri	Balasore.	Total
	Rs.	Rs.	Rs.	Rs.
Inspection of <i>khanapuri</i> ...	75,000	40,000	33,000	1,48,000
Attestation ...	4,80,000	2,05,000	1,80,000	8,65,000
Settlement of rents ...	1,86,000	58,000	1,01,000	3,45,000
Case-work, etc. ...	61,000	15,000	50,000	1,26,000
Assessment of revenue ...	1,90,000	38,000	67,000	2,95,000
Miscellaneous total ...	1,82,000	60,000	1,04,000	3,50,000
Total ...	11,74,000	4,16,000	5,39,000	21,29,000

The first item is a comparatively small one, and includes only the share of the *khanapuri* expenditure met from the settlement budget, and consists chiefly of the pay of the head office and of the *khanapuri* officers.

Under attestation I have included both the expenditure on the original attestation and that incurred in re-attesting and preparing the records for settlement of rents. The expenditure is lightest in Balasore, where very little work had to be re-done, while in Cuttack it is swelled by the inclusion of about 1½ lakhs on account of the pay of the Settlement Officer and his office. Settlement of rents explains itself; the cost is lower in Puri than in the other districts, partly because a larger share of the expenditure of 1896-1898 has been debited to re-attestation, and partly because the officers employed in Puri were on the whole lower paid. Most of the pay of the head office and of the Assistant Settlement Officers in charge during 1896 and 1897, i.e., about one lakh, is debited to this head.

Case-work covers all the expenditure incurred during the period of draft publication on the disposal of objections and the trial of suits under section 106. It was lowest in Puri because draft publication followed very promptly on re-attestation, and the people appear, moreover, to have been more backward in filing objections. It was highest in Balasore owing to the large crop of cases, especially in the neighbourhood of Balasore town.

Settlement of Revenue includes the expenditure incurred in writing completion reports for over 6,000 estates, for disposing of the proprietors' objections and taking *kabuliyats*, and includes most of the pay of the Settlement Officer and the Assistant Settlement Officers in charge for 1897-98 and 1898-99. Under "Miscellaneous," come the cost of copying the record-of-rights (about 1½ lakhs), of revising the proofs of the new survey maps and of re-numbering villages (about Rs. 10,000), of preparing *milan khasras* and other statistical statements, of miscellaneous enquiries such as those into the effects of irrigation and protection, of the handing over and destruction of records and of the writing of the final report; including a share of the expenditure of the head office and a large part of my own and Mr. Webster and Mr. Kingsford's pay during the last year.

626. Taking the area as before at 4,797 square miles, the average cost of the principal stages of the work is as follows:—

Incidence of cost.

Stage.				Per square mile (in rupees)	Per acre (in annas)
<i>Khanapuri</i>	...	...	...	30 8	77
Attestation	...	...	...	180 3	4 51
Settlement of rents	...	...	...	71 9	1 80
Case-work	...	..	...	26 3	68
Assessment of Revenue*	...	...	...	71 1	1 77
Others	...	...	...	72 9	1 82
Total cost of Settlement				453 3	11 33

* Calculated on the temporarily settled area of 4,150 square miles, &c., excluding revenue free areas, Chulka Lake, Government lands, etc

The expenditure on survey, has already been estimated at Rs. 181 per square mile, or 2 96 annas per acre. Thus the total cost of the operations in the temporarily-settled area works out to 14 29 annas per acre.

S. L. MADDOX,
Settlement Officer.

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**DEPARTMENT OF LAND RECORDS AND AGRICULTURE,
BENGAL.**

No. 15498.

FROM P. C. LYON, Esq., I.C.S.,

Director of the Department of Land Records and Agriculture, Bengal,

TO THE SECRETARY TO THE BOARD OF REVENUE, L. P.

Dated Calcutta, the 24th July, 1900.

SIR,

I HAVE the honour to submit herewith, for the orders of the Board and of Government, the Final Report of the Settlement of the Province of Orissa by Mr. S. L. Maddox, I.C.S., together with the volume of appendices attached to it, and the maps which have been prepared to illustrate it. The report, which has not as yet been finally printed off, was submitted to me by Mr. Maddox just before he left India on furlough in March last, but will not be ready for publication in its finally corrected form for some few weeks to come.

2. The report is voluminous and is complete in every respect, such information as could not be included in the body of the report being given in full in the appendices.

Introductory.

Unlike most other temporarily-settled areas in India, the Province of Orissa had not known settlement operations for sixty years, and this circumstance alone, while adding greatly to the difficulty and the cost of the present proceedings, has rendered it necessary to summarise, as far as possible, in the Final Report the considerable changes that have taken place during the currency of the expiring settlement, and to present to Government a complete and exhaustive review of the economic condition of the Province. It is true that the late Sir William Hunter and Mr. George Toynbee have in recent years written at length on the history and circumstances of Orissa, but the present settlement proceedings have in themselves contributed so much new material for the illustration of the subject, that the existence of their works has not absolved Mr. Maddox from the duty of dealing very fully with the subject before him. The Final Report now submitted is a veritable Encyclopædia of the Province, dealing with its history, its people, its agriculture and its material prosperity, while detailing at the same time the fiscal history of the temporarily-settled areas under settlement, the proceedings undertaken for their resettlement, and the results of those proceedings, both as they have affected Government and the people.

3. The following is the general arrangement of the report, which is divided into six parts. The first of these contains

Arrangement of the report

physical and statistical accounts of each of the three districts of Cuttack, Balasore and Puri; the second deals with agriculture, irrigation and the material condition of the people; the third is mainly historical, but combines with the fiscal history of the Province an exhaustive account of the various tenures upon which land is held within it; the fourth deals with the procedure adopted in the course of the various stages of the recent settlement proceedings; the fifth summarises the results of those proceedings, and the sixth gives an account of the revenue free and other areas excluded from the present settlement, concluding with a brief chapter on the cost of the operations. The appendices to the report consist of a reprint of the most important correspondence connected with the settlement, a collection of the various rules under which the operations were conducted,

some thirty-eight statistical and descriptive statements illustrating the report, and the detailed reports on the districts of Puri and Balasore, written by Mr. H. McPherson, I.C.S., and Mr. D. H. Kingsford, I.C.S., respectively. While it was not, perhaps, wholly necessary that these two latter reports should be reproduced, they are of considerable value in themselves, and it would have been a matter for regret had they been left unpublished. A perusal of the report will also show that Mr. Maddox has not been able to avoid some repetition, the subjects allotted to different sections of the report being in some cases so nearly allied as to render this inevitable; but such repetition as there is has served to make each separate part of the report complete in itself, and is for that reason the less to be deprecated.

4. It is unnecessary for me to deal at any length with the subjects treated in the earlier chapters of the report. The interesting paragraphs, in the chapters containing physical accounts of Cuttack and Puri, which deal with the question of embankments, especially those which relate to the district of Puri, will be doubtless commended by Government to the special attention of the Public Works Department, and the effect that the escape of flood water through certain breaches in those embankments has had on the material prosperity and revenues of some of the eastern parganas of that district is already the subject of a reference to Government. The chapter on irrigation (paragraphs 103 to 118) contains a full report on the subject of the imposition of an owner's rate on lands irrigated or irrigable from Government canals, which will be dealt with in a separate communication, in answer to the call made by Government for a special report on this subject. The agricultural chapter (paragraphs 119 to 159) contains much information of interest which will serve to supplement Mr. N. N. Banerjee's valuable report on the agriculture of Cuttack, and deals in special detail with the great rice crop and with *pau*, the latter a crop which is likely to prove of increasing value to the cultivators as the Province is opened out. The chapter on the History of Prices deals with the fluctuations in the price of common rice, which is by far the most important crop in Orissa, and contains a most instructive diagram showing those fluctuations during the past sixty years, a picture of the varying circumstances of the people during that period which could not well be improved upon. There is much in the chapter on the material condition of the people that affords food for reflection and comment, notably in the description given of the character of the people, which appears to bear in many respects a likeness to that of the Assamese, though the Uriyas are differentiated from the Assamese in that they are always ready to emigrate and travel in search of work. This readiness to emigrate on the part of the male population—for the emigrants are never accompanied by their families—is a marked characteristic of the Uriya, and is in pleasing contrast to the immobility of the Biharis and the northern races of India. It proved an undoubted safeguard to the population of Orissa at the time of the great famine, and contributes greatly in the present day to the prosperity of this corner of the Empire. On the subject of stocks of grain, with which Mr. Maddox deals in paragraphs 178 and 197, I fear we have little or no information at present. In the year 1897, after careful local enquiry, the Commissioner of the Division estimated that the stocks of rice in hand would not last beyond August in that year, whereas there was a brisk export throughout the year, without any importation to supplement the local stocks.

Mr. F. E. Pargiter, I.C.S., has been kind enough to scrutinise the Chapter on the early geography and history of Orissa, and in the interesting paragraphs which have been devoted to the peoples and religions of the Province, Mr. Maddox has drawn freely from many acknowledged authorities, such as Mr. H. H. Risley, I.C.S., C.I.E., Dr. Rajendra Lala Mitra, Dr. Stevenson, Mr. Stirling and Captain S. C. Macpherson.

5. The area of the Province of Orissa amounts to over 24,000 square miles, and may be roughly divided into the hills (17,000 square miles), in which are included the Tributary States, the district of Angul, and the Government Estate of Khurda in Puri, and the alluvial plains (7,000 square miles), lying between these hills and the sea. Some account of the Tributary States is given in Chapter XXIV

Area of the Province.

of the Report. The district of Angul, a resumed State, was surveyed and settled some years back, and the Government Estate of Khurda has recently been settled under Mr. Maddox's supervision, and a separate report of the settlement submitted. The following statement shows roughly the various areas that go to make up the plains portion of the Province:—

	Square miles.
Temporarily-settled areas	4,200
Revenue-free areas	524
Permanently-settled areas cadastrally surveyed ...	546
Permanently-settled areas topographically surveyed	1,420
The Chilka Lake	310
Total	7,000

The present report deals in detail with the survey and settlement of the first two of these classes only, but a brief account is given also in Chapter XXIV of the circumstances in which some of the permanently-settled estates came to be cadastrally surveyed. A special chapter (Chapter XXIII) is devoted to the revenue-free areas included in the 524 square miles noted above, but they are also included in the general sections of the report. On the other hand, the statistics of cultivation which are given in Appendices E and F include not only the Khurda Government Estate, but also about 150 square miles of the permanently-settled and cadastrally-surveyed area, or 5,897 square miles in all.

6. These figures of cultivation and crops show that out of an area of 5,897 square miles, comprised in 13,580 villages, 3,903 square miles (or 66 per cent.) are cultivated, 544 (or 9 per cent.) are culturable but not cultivated, while 1,450 (or 25 per cent.) are unculturable. Out of the uncultivated area, 177 square miles, or 3 per cent. of the total area, have been formally reserved as grazing or cremation grounds, as detailed in Appendix L, and encroachment on these reserves has been strictly forbidden. It is unnecessary to dilate at any length on the crop areas shown in Appendix F. It is sufficient to note that 3,439 out of a net cropped area of 3,903 square miles bear a rice crop, that 178 square miles are homestead lands, and 307 square miles (including some of the rice-lands) are twice cropped.

7. Within the same area as that for which cultivation has been shown, I find that the figures entered in the following table represent generally the average size of a village in Cuttack, the extent of each tenant's holding, and the size of each field, district by district:—

	Cuttack.	Balasore.	Puri.
	Acres.	Acres.	Acres.
Size of each village	301	304	324
Size of each holding (excluding waste lands)	1.26	1.86	1.82
Size of each field—			
(1) Including waste plots ... ..	.34	.48	.29
(2) Excluding waste ... ..	.23	.34	.20

The average actual area of land held by each individual raiyat would of course be considerably in excess of the size of the average holding, as many raiyats hold more than one holding, and from figures given elsewhere in the report, it may be gathered that the average holding of an agriculturist (as distinguished from labourers holding only homestead lands) is something over three acres for the Province generally.

8. As to the classes of people who occupy the three districts of Cuttack, Balasore and Puri, the greater portion of which is included in the above statistics of area, it is sufficient to say that out of a total of 4,200,000 inhabitants, no fewer than 4,090,000 are said to be Hindus, while of the rest, 98,000 are Mahomedans, 4,000 Christians, and 8,000 belong to other religions. In paragraph 219 is given an interesting table of the various castes to which the members of the Hindu population belong, and in paragraph 170 a division of the population by occupations is given, from which it appears that over 2½ millions are returned as agriculturists.

9. Turning now to the area of 4,750 square miles with which the report is chiefly concerned, it will be well to make some reference to its fiscal history before dealing with its present circumstances. Mr. Maddox treats of the early settlements of the Province, before the commencement of British rule, in paragraphs 233 to 241 of the report, which should be read with paragraph 547, in which an attempt is made to discover what revenue was obtained from Orissa by the Moghuls and the Mahrattas. All that can be definitely said of these settlements would appear to be that, while the Moghuls made some attempt to proportion the revenue to the assets of the country, the Mahrattas wrung out of it all they could, irregularly and ruthlessly, with the result that when we first approached the question of its settlement in 1803, the Province was found much impoverished and in a state of anarchy. In paragraphs 242 to 249, Mr. Maddox details the history of the earlier settlements made by us from 1803 up to 1830, an unfortunate record of assessment on insufficient enquiry, and of the enforcement of inelastic rules for the realisation of inequitable revenues, and he shows incidentally how many an old Uriya family was ruined, and how the proprietorship of the land fell, in many cases, into the hands of Bengali speculators. Between 1805 and 1820 the revenue rose fitfully from about 11 lakhs to 13½ lakhs, with but little justification for the increase in either the spread of cultivation or the circumstances of the people. From 1820 to 1830 but little change appears to have been made in the revenue demand.

10. The foundations of the present prosperity of the Province rest on the great settlement of 1835 to 1845, preparations for which were commenced as early as 1830, and which was held to run from 1837, although the proceedings were not finally completed before 1845. In paragraphs 250 to 353 Mr. Maddox has fully described the procedure adopted at this settlement, and draws attention to the knowledge, experience and sympathy exhibited by all the officers connected with it, and by Sir Henry Ricketts and Mr. Wilkinson in particular. Taught by the sad mistakes of their predecessors, these officers toiled with marked industry and ability to master every difficulty that stood in the way of a fair assessment, and to store up and tabulate the detailed information as to the material condition and economic circumstances of the country, without which no successful settlement can be made. Their efforts were cordially supported by the authorities in Calcutta, and their reward has been the unquestionable success of the settlement, the implicit confidence of the people in the records prepared by them, and the endurance of their names as household words throughout the districts in which they laboured.

11. As regards the zamindars with whom Government made this settlement, Mr. Maddox has traced with great care and in considerable detail the origin of the proprietary rights which were then confirmed. The majority of the real zamindars who held proprietary rights under the Moghuls or Mahrattas had been recognised as Rajas of Killas, or had received permanent settlements of their lands, before the commencement of the last settlement proceedings, and the present zamindars of Orissa would appear to be descended from all the *talukdars*, rent-collectors, village headmen, holders of resumed *jugirs* and the like, who were found, at the time of the British conquest, to be paying their revenue direct into the Mahratta treasuries, as well as from the holders of the larger revenue-free properties that were resumed and assessed to revenue by us during the early years of the present century. Under these zamindars again a class of subordinate proprietors, or proprietary tenure-holders, was recognised at the last settlement, composed for the chief part of village headmen, such as *mugadams*, *sarbarahkars* and *pursethis*, or the purchasers or recipients of proprietary rights in small plots of land from the zamindars or *mugadams*, such as *kharidaders* or *shikmi zamindars*.

The above formed the proprietary classes, the zamindars paying their revenue direct to the treasury, and the sub-proprietors, or proprietary tenure-holders, paying their revenue through the zamindars of the estates within which their lands lay; with them also may be included the *lakhraj bahaldars*, or holders of confirmed revenue-free lands, who possess a permanent right to hold their lands free of land revenue, and are independent of the

zamindars of whose estates their lands originally formed a part, except in so far as they are bound under Act IX (B.C.) of 1880 to pay certain cesses through those zamindars.

The tenantry who hold beneath the proprietors or proprietary tenure-holders mentioned above may be divided roughly into seven classes: (1) the *Tankidars*, or holders of small areas permanently assessed at a quit-rent; (2) the *Nisfi-basiasfidars*, or holders of resumed rent-free lands assessed for the term of the last settlement at half rates; (3) the *Kamil basiasfidars*, or holders of resumed rent-free lands assessed at the last settlement at full rates; (4) the *Thani raiyats*, or resident cultivators, whose rents were fixed for the term of the settlement, (5) the *Chundma raiyats*, or holders of homestead lands, whose rents were also fixed for the term of the settlement, (6) the *Pahi raiyats*, or non-resident raiyats, who were practically, in most cases, tenants-at-will, and (7) the holders of service and other *jagirs* who held their lands rent free, either in consideration of services to be rendered, or as rewards for services in the past. The above list is not exhaustive, but includes all but a few small classes of the tenants of the Province.

12. The statistical results of the settlement as it affected both Government, the proprietors and the various classes of the tenantry, may be briefly summarised. The temporarily-settled areas were settled with about 8,000 proprietors in 3,571 estates, and the following table shows how the area of the temporarily-settled lands was dealt with, and how revenue was assessed on the estates comprised within them:—

District	Total area	Cultivated area.	Assessed area	Mufassal jama, or assets.	Sadat jama, or revenue	
					Percentage.	Amount.
1	2	3	4	5	6	7
	Acres	Acres	Acres	Rs.		Rs.
Cuttack ..	1,174,900	697,000	621,000	11,31,000	64	7,14,100
Balasore ..	913,999	554,000	493,200	5,75,000	65	3,77,290
Puri ...	489,100	377,000	302,100	4,41,000	66	2,92,100
Total	2,617,998	1,628,000	1,416,300	21,88,200	65	13,84,190

The above figures further show that the incidence of revenue was Rs. 12-5 per assessed acre in Cuttack, Rs. 12-3 per acre in Balasore and Rs. 15-6 in Puri, or Rs. 15-7 for the whole Province, and that the balance of the assets left to the zamindars amounted to Rs. 4,06,900 in Cuttack, Rs. 1,98,310 in Balasore, Rs. 1,48,800 in Puri and Rs. 7,54,010 in the Province as a whole. I have been unable to find any statement of the areas recorded at the last settlement as held by those proprietary tenure-holders who have been treated as such at both the past and the present settlements, that is, the *muqadams*, *sarbarahkars*, *pursethis* and the like; but I gather from the figures in appendices (A, G B, and G-C, and elsewhere in the report, that some 3,000 such tenures were settled with about 6,000 tenure holders. The assets of these tenures and the revenue payable for them to the zamindars are shown in the following table:—

District.	Assets	REVENUE.		Balance
		Percentage	Amount.	
1	2	3	4	5
	Rs.		Rs.	Rs.
Cuttack ...	1,28,609	80	1,02,741	25,868
Balasore ...	65,114	83	54,000	11,064
Puri ...	2,11,617	61	1,70,856	40,761
Total	4,06,340	81	3,27,657	77,683

As a general rule, the proprietor retained 20 per cent. of the gross assets, and paid the balance to Government, *i.e.*, 60 per cent. of the gross assets. The revenue thus paid has been included in the statement of revenue assessed on the proprietors.

The *kharidars* differ from the above in that, whereas they were treated as subordinate proprietors at the last settlement, and their rents calculated at a certain percentage of the assets they received, they have been treated in the present settlement as tenure-holders under the Bengal Tenancy Act, and their rents settled accordingly. The following table shows the areas held by them and the rents assessed upon them at the last settlement. I am unable to give figures for the assets of their tenures :—

DISTRICT.	Area.	Rent.	Incidence per acre.
1	2	3	4
	Acres.	Rs.	Rs. A. P.
Cuttack ...	26,900	28,600	1 1 0
Balasore...	14,800	11,200	0 12 1
Puri ...	3,700	4,000	1 1 3
Total ...	45,400	43,800	0 15 5

The revenue-free lands at the last settlement amounted to 134,442 acres, or 11·4 per cent. of the total area dealt with in Cuttack, 106,015 acres, or 11 per cent. in Balasore, and 90,636 acres, or 18·1 per cent. in Puri, giving a total of 331,093 acres, or 12·6 per cent. for the whole Province. This is a large area, but it must be remembered that Orissa is one of the holy lands of the Hindus, and supports a very large population of Brahmin priests in attendance at an infinite number of Hindu shrines.

13. The following figures show how subordinate tenancies were treated at the last settlement, and are worthy of notice, as some marked changes will be found in the figures when we come to deal with the existing statistics which have formed the basis of the present settlement operations :—

CLASS	CUTTACK.				BALASORE.				PURI.				TOTAL.			
	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.	Area in acres.	Percentage of assessed area.	Rent.	Incidence per acre.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
			Rs.	Rs. A. P.			Rs.	Rs. A. P.			Rs.	Rs. A. P.			Rs.	Rs. A. P.
Tankdars	500		100	0 8 2					25,100	8·3	13,500	0 7 9	51,000	8·0	13,700	0 7
Nagbasais	87,300	14·0	26,300	0 0 5	75,800	18·5	24,200	0 5 1	87,300	18·9	33,200	0 9 10	231,300	18·3	84,000	0 8 1
Ramul	37,700	0·0	84,000	0 14 8	37,100	7·5	28,110	0 12 1	5,800	1·9	6,700	1 2 6	80,000	5·7	80,000	0 13
Thonis	136,700	31·5	378,700	3 15 5	107,100	31·7	1,08,000	1 11 6	56,900	33·2	2,01,000	3 1 4	247,700	37·8	7,57,300	3 4
Chaudins	10,100	1·0	40,300	3 15 10	15,600	3·1	30,400	1 15 9	1,300	0·4	8,900	5 6 11	26,900	1·0	70,000	3 14
Pahi	906,900	43·3	5,13,500	1 14 3	219,100	44·4	250,200	1 3 11	61,900	37·4	1,28,100	1 7 8	870,000	60·3	5,96,700	1 9
Jagirs	23,780	3·6	...	...	16,380	3·0	...	...	8,850	2·0	...	...	46,910	3·3	...	...

With reference to the above table, it may be observed that Balasore was assessed lightly, the population being scanty, the soil poor, and the lands liable to flood, and interspersed with considerable tracts of jungle. In Puri also great damage was done almost annually by floods, and the lands of many parts of the district were no better than those of Balasore. On the other hand, it was more highly assessed, the district being more closely cultivated and a larger proportion of the area being held by privileged tenants, for whom comparatively high rents were settled. Cuttack was then, as it is now, by far the most prosperous district, being less liable to flood, having a more fertile soil, and being in a more advanced stage of civilisation. It will be noticed that the rents of *pahi raiyats*, which have always been more or less competition rents

in Orissa, reflect with much accuracy the general conditions obtaining in each district, the incidence of such rents standing at Re. 1-14-6 for Cuttack, Re. 1-7-8 for Puri and Re. 1-2-11 for Balasore. As will be seen from the history of the *thani* holdings during the currency of the settlement, there was small justification for the settlement of their rents at rates so far above those of the *pahi* holdings, and had these lands been assessed to lower rents it is probable that a smaller proportion of them would have been abandoned.

14. The settlement thus concluded was to have run to the year 1807 only, but the great Orissa famine of the years 1865-66 rendered it inadvisable to undertake re-settlement operations during the years when the former settlement was drawing to a close, and that settlement was accordingly prolonged for another thirty years. The history of the rapid recovery of the Province from the horrors of the great famine has subsequently shown that this extreme leniency was scarcely needed, and that a re-settlement might well have been made some twenty years ago, to the advantage of Government and without undue harassment of the people. The result of the excessive prolongation of the former settlement has undoubtedly been the exclusion of Government for a lengthy period from its fair share of the produce of the soil, and the retention by the landlord classes in Orissa during the same period of profits to which they had no equitable right.

15. During the sixty years of the currency of the settlement of 1837, the Province has developed in every direction in spite of the disaster of 1866, the population has increased by over 80 per cent., cultivation has extended by 30 per cent., communications have been largely improved, bringing an increase in the volume of trade, and the prices of staple food crops have trebled, securing largely increased profits to the cultivators. This development has naturally been accompanied by an increase in the rents of the *pahi* raiyats, the only class for whom rents were not fixed for the term of the settlement, and the figures given by Mr. Maddox show that the incidence of their rents advanced from Re. 1-14-6 to Rs. 2 11-6 in Cuttack, from Re. 1 2-11 to Re. 1-11-1 in Balasore, and from Re. 1-7-8 to Re. 1-13-8 in Puri, the over-assessment of the last-named district being to some extent responsible for the comparatively small enhancement there. It is a significant fact, however, as showing at what high rates the rents of *thani* raiyats were fixed at the last settlement, that the general incidence of the rents of *pahi* raiyats did not, even in the course of 60 years, rise to that shown by the *thani* rents fixed in 1837. This evidence would not in itself be conclusive as to the over-assessment of *thani* lands at the last settlement, as it is to some extent true that these privileged tenancies frequently included the best lands in the village, but it is borne out by the figures which show how materially the area held by *thani* raiyats, and the rents paid by them, diminished during the term of settlement, in spite of the valuable privileges conferred by the *thani* status. The following table compiled from the figures given by Mr. Maddox in paragraphs 322 and 462 of his report, will show the difference between the areas and rents of *thani* raiyats as fixed in the settlement of 1837 and as found by us to be existing at the time of the present settlement:—

DISTRICT.	LAST SETTLEMENT, 1835 to 1845.		EXISTING,* 1890 to 1900.	
	Area.	Rent	Area.	Rent
1	2	3	4	5
	Acres.	Rs.	Acres.	Rs.
Cuttack	133,700	3,78,700	83,800	2,20,900
Balasore	107,100	1,85,000	45,600	82,100†
Puri	96,900	2,01,600	66,700	1,23,600
Total	337,700	7,65,300	196,100	4,26,600

* Note. — *Thani* areas and rents included in *tham-pahi* holdings have been amalgamated with the figures in columns 4 and 5.

† See Appendix U to Mr. Kingsford's Report on Balasore.

Among other changes which took place in the course of the settlement was the multiplication of estates and of landlords, the number of estates rising from 3,571 to 6,377, and the number of individual landlords from 8,000 to 42,400. As might have been expected, the lands in the direct possession of the landlords increased proportionately, and the following figures show the increase in these lands, and in the valuation made of them, in the sixty years:—

DISTRICT.	LAST SETTLEMENT.		EXISTING.	
	Area.	Valuation.	Area.	Valuation.
1	2	3	4	5
	Acres.	Rs.	Acres	Rs
Cuttack ...	42,300	75,400	85,800	2,23,200
Balasore ...	20,400	25,100	46,600	81,100
Puri ...	26,000	46,800	40,100	80,200
Total ...	88,700	1,47,300	172,500	3,84,500

This very marked increase in the area and value of the lands held by the proprietors was by no means the only benefit derived by them during the course of the settlement, as may be inferred from the account which has been given above of the rise in the incidence of *pahi* rents. In order to show clearly to how considerable an extent the landlords were able to absorb the increasing profits of cultivation during the term of the settlement, I submit the following table, compiled in the main from Mr. Maddox's Appendices A-A to C-N and G-A to G-C, showing the financial position of the proprietors and proprietary tenure-holders at the commencement of the last settlement and at the time that the present re-settlement operations were initiated:—

	INCOME AT COMMENCEMENT OF LAST SETTLEMENT, <i>vide</i> FIGURES IN PARAGRAPH 12 <i>supra</i> .		INCOME EXISTING BEFORE PRESENT RE-SETTLEMENT.			
	Amount.	Percentage of assets.	Assets.	Revenue.	Balance.	Percentage of existing assets actually retained.
1	2	3	4	5	6	7
<i>Proprietors.</i>	Rs.		Rs.	Rs.	Rs.	
Cuttack ...	4,06,900	36	18,47,400	7,14,100	11,33,300	61
Balasore ...	1,98,310	35	9,88,800	3,77,290	6,11,510	62
Puri ...	1,48,800	34	5,78,700	2,92,800	2,80,900	49
Total ...	7,54,010	35	34,09,900	13,84,190	20,25,710	59
<i>Proprietary tenure-holders.</i>						
Cuttack ...	25,868	20	2,04,434	1,02,741	1,01,693	49
Balasore ...	11,054	17	1,03,733	54,060	49,672	48
Puri ...	40,761	19	2,67,188	1,70,856	96,332	36
Total ...	77,683	19	5,75,354	3,27,657	2,47,697	43

There was no great change in the areas held revenue and rent free between the settlements, nor in the areas and rents of the other privileged tenants, with the exception of the *kamsi basiaftidars*, whose lands decreased, their privileges being less valuable than those of the *nisi basiaftidars*, and consequently less carefully maintained.

16. I have thought it advisable to deal at some length with the figures of the settlement of 1837, and the changes that occurred during the sixty years that had elapsed since it was made, in order that the task that lay before the officers who conducted the recent settlement might be made the more clear, and that the results that will be shown to have accrued from the present proceedings might be the more easily intelligible. I will now summarise briefly the proceedings undertaken for the re-settlement of the temporarily-settled lands of the Province, and the circumstances in which those results were attained.

17. The only portions of the area to be dealt with that had been professionally surveyed previous to the commencement of the recent settlement operations were an area of 364 square miles of irrigated and irrigable lands in the district of Cuttack, and an area of 105 square miles, comprised in the *ekhuajat mahals*, or temple lands, in the district of Puri. In these areas a cadastral survey on the scale of 32" to the mile had been carried out in the years from 1876 to 1879, and the maps then prepared were utilised in the present operations, being revised in the course of them so as to bring them up to date. With the exception of these areas and certain permanently settled areas that had been previously dealt with, and were consequently excluded from the scope of the operations, the whole of the districts of Cuttack, Balasore and Puri were traversed, the permanently-settled areas being subsequently topographically surveyed on the scale of 2" to the mile, and the remaining temporarily-settled areas, with a few isolated permanently-settled estates taken up with them for special reasons, being cadastrally surveyed on the scale of 16" to the mile. The actual area covered by the traverse survey appears to have been 5,523 square miles, while 4,797 square miles were cadastrally surveyed, 1,013 square miles were dealt with by the topographical party, and the maps for an area of 469 square miles previously surveyed were revised. Owing to the absence of any completion report of the work done by the Survey of India in Orissa during the recent operations, it is difficult to obtain accurate figures for either the extent or the cost of their work, and those that have been supplied by Mr. Maddox have been compiled by him from annual reports and other similar sources of information.

18. The traverse survey operations were commenced by a single party under Mr. Paterson in the field season of 1889-90, two parties were employed in the field seasons from 1890 to 1893, and a single party completed the work by September 30th, 1894. There were some difficulties encountered in connection with the determination of the unit of survey, but ultimately the existing village, as pointed out by the villagers, was adopted, and has subsequently proved the most reasonable basis for our work, as well as the one most acceptable to all parties. There was little obstruction on the part of raiyats or zamindars, and the work was done efficiently and inexpensively, the cost averaging Rs. 39 per square mile.

19. The cadastral survey was carried out, as noted above, on the scale of 16" to the mile, the only exceptions made being in the case of large towns, which were surveyed on the 32" or 64" scales, and where it was not found possible to show all the details of village sites on the 16" maps. In such cases these sites were separately surveyed on the 32" or 64" scale, and entered on the margin of the village maps. The work was mainly performed by trained up-country amins from the North-West Provinces, the attempt to utilise the services of local *patwaris* and other Uriyas proving a failure, owing to the very slow progress achieved by them and the consequent increase in the cost of coolie labour. The rate paid to these amins was Rs. 3 per 100 acres, and the cost of coolies averaged 9 pies per acre. The rules under which the cadastral work was done have not been reproduced by Mr. Maddox. In fact,

they varied somewhat in details from season to season, though following generally the instructions contained in the Board's Survey Manual.

The following figures of progress are taken from Mr. Maddox's statement in paragraph 413 of his report:—

Survey year.	Number of survey parties.	Area dealt with. Square mls.
1889-90	1	358
1890-91	2	695
1891-92	3	1,396
1892-93	3	1,569
1893-94	1	619
1894-95	1	5
Total		4,672

The above does not include the revision area of 469 square miles, which was dealt with in the years 1892-93 and 1893-94 by small detachments from the main survey parties.

The total cost of these operations amounted to R. 4,40,786, the cost rate averaging nearly Rs. 100 per square mile for cadastral survey and Rs. 53 for the revision area.

20. In addition to the work of cadastral survey, the amins of the Survey of India Department were also entrusted with the work of writing up the settlement records for each village on the field (or *khanapuri*), being controlled and supervised at this stage both by their own officers and by officers of the Settlement Department deputed for the purpose. The records thus prepared were four in number, (1) the *khewat*, in which were entered the names, *tauzi* numbers, areas and proprietors of each estate of which any lands were situated in the village; (2) the *khasra*, or field index to the map, containing one entry for each field or separate plot belonging to one cultivator, specifying the names of the owner and the occupier, its area, the crop borne on it, and a description of the nature of the soil; (3) the *khatian*, or abstract record, containing a list of the tenants of the village, with details of the lands held by each, the rent payable for them, and the class of tenancy to which the holding belonged; and (4) an abbreviated *khatian*, known as the *parcha*, which was prepared simultaneously with the *khatian* and handed over to the tenant, to enable him to understand what was being entered in the record, and to check its accuracy. The difficult work of filling up these forms was greatly complicated in Orissa in the early stages of the proceedings by the fact that it was entered upon without sufficient preliminary enquiry, and before adequate preparations had been made for it by the determination of suitable forms, the compilation of instructions for record writing, and the training of amins for the work. The consequence was that the *khanapuri* was done during the first two seasons by untrained men, who were frequently insufficiently acquainted with the language of the country and who had to work on unsuitable forms and with inadequate instructions as to how to deal with them, and it was not until well on into the field season of 1891-92 that the officers appointed to supervise the work had hammered out rough rules for the guidance of their subordinates, and until the autumn of 1892 that these rules were consolidated, approved by the responsible authorities and prescribed for general use. Thus for two seasons, during which the record-writing was completed for an area of over 1,000 square miles, there were practically no rules for its conduct, while in the season of 1891-92, during which nearly 1,500 square miles were dealt with, the various survey parties were dependent on local rules, hurriedly drawn up by the supervising officers, and in many cases not wholly suitable. At the same time the forms in which the records were to be prepared were constantly being changed, and the Uriya amins, to whom the work of *khanapuri* was eventually entrusted, proved indolent and difficult to teach. In these circumstances it is not to be wondered that the Survey Department complained of the difficulties of the work, or that the energetic and capable supervision exercised by Colonel Sandeman and his assistant, Lieutenant (now Captain) Crichton, was insufficient at once to secure efficient work and accurate record-writing. I was myself one of the

Assistant Settlement Officers deputed to supervise *khanapuri* during 1891-92, and can speak with experience of the difficulties of the work and of the impossibility of expecting good records in the circumstances that then obtained.

21. A marked change came over the conduct of the proceedings, however, in the year 1892, when the *khanapuri* rules referred

Reforms in 1892.

to above were brought into general use, when Mr. Maude was appointed Settlement Officer, and when the admirable system of co-operation and joint control evolved by Colonel Sandeman took the place of the confusion that had reigned in the previous seasons. The rules, as revised during the season 1891-92, were finally printed in March, 1893, and are substantially the same as those which were followed up to the end of the work, and which are reproduced as Appendix B-2 of Mr. Maddox's report. From this time forward the work of the amins steadily improved, and the quality of the records prepared in the district of Balasore, which was taken up last, is in marked contrast to the quality of those in Puri and in those tracts in Cuttack which had been dealt with in the years from 1880 to 1892. It is unnecessary here to repeat the figures showing the progress of the work, as they approximate closely to the figures given above, in paragraph 19, for the progress of cadastral survey. The figures for the cost of this stage of the work given by Mr. Maddox in paragraphs 414 and 415 of his report, and again in paragraph 623, are somewhat inconsistent, owing to the want of sufficient information, but I gather from the figures shown in paragraph 415 that while the indifferent *khanapuri* of the earlier years was done at a somewhat lower rate, the more accurate records prepared in later years cost from Rs. 50 to Rs. 60 per square mile.

22. The various important questions that were dealt with at this stage of the work are enumerated and fully dealt with in paragraphs 397 to 411 of the report. The action taken to collect statements of tenancies with their areas and

Important questions dealt with at the record-writing stage.

rents from the landlords, previous to *khanapuri*, was a mistake which occasioned some misrepresentation of facts and a good deal of corruption, while the attempt made to collect *parchas* from the raiyats, with a view to their completion in office, and their subsequent redistribution, was soon abandoned on account of the evils to which it gave rise. While the employment of some of the Collectorate *kanungos* on settlement work was a partial success, the attempt to utilise the services of *patwaris* as amins ended in complete failure. There is always some difficulty found in all districts in Bengal in persuading the subordinate police officers that it is their duty not only to countenance but to assist the Settlement Department, and they began in Orissa, as elsewhere, by forbidding the *chaukidars* to render us any assistance. This difficulty was soon overcome by an appeal to the higher police authorities, and the *chaukidars* were found willing enough, as soon as the prohibition was removed, to give such help as was required of them. Mr. Maddox has given, in his paragraph 410, a full account of the discussions on the question as to what area was to constitute the unit of survey, but I do not find any statistics as to the number of disputes concerning village boundaries that were decided in the course of the work. It is probable that the confusion that obtained in the earlier years of the work rendered the compilation of accurate figures for these cases impossible. I may mention here that Mr. W. C. Macpherson, as Director of the Department of Land Records and Agriculture, was closely associated with Mr. Maude in the determination of the various questions dealt with at this stage.

23. After the records had been prepared in the field by the Survey Department, they were compared with one another and checked in the office of each camp, areas were

Attestation.

entered in them, and they were abstracted in certain tabular statements. The papers were then all handed over to the Settlement Department, in order that rents and status might be entered after due enquiry by a responsible Revenue Officer, preliminary disputes decided, and the records published in draft in accordance with the provisions of the Bengal Tenancy Act. Mr. Maddox points out in paragraph 417 of his report how many difficulties beset this stage of the work in Orissa, due to the same causes that had rendered the *khanapuri* of the earlier stages of the work so inefficient.

The work of attestation was further complicated by want of experience, and by divided counsels as to how this work should be done, as to the manner

in which the *khatians*, which form the units of the record-of-rights in each village, should be prepared, and as to the amount of comparison with the records of the last settlement that was necessary for the proper verification of the record. For the first three years during which the work proceeded, also, there was much doubt as to how far the muharrirs conducting the clerical part of the work required supervision, and as to the powers to be entrusted to them in the matter of entry of disputes, correction of mi-takes and the like.

In consequence of these difficulties, this work, which was begun in the season of 1890-91, was very inefficiently carried out during that and the two subsequent seasons, in spite of some valuable pronouncements by Mr. Finucane, Director of Land Records and Agriculture, as to the principles which should guide this stage of the work, and it was not until Mr. Maude had had time to deal thoroughly with the question, after his appointment at the close of 1892, that any wholly satisfactory attestation work was done. The rules that were drawn up by Mr. Maude in 1893 were based on the various sets of rules which had been prescribed in different circles by different Assistant Settlement Officers during the previous season. They were comprehensive and complete, and although there was a good deal of further discussion in 1894 concerning important points, the right decision of which was essential to good attestation, the main principles and the great mass of the details of Mr. Maude's rules were adhered to, and appeared in the rules as finally revised, and as now reprinted in Appendix B to the report. It may also be noted here that the amendment of the rules under the Bengal Tenancy Act, which was made in 1894, mainly at the instance of Mr. W. C. Macpherson, Director of Land Records and Agriculture, contributed in no small degree to the simplification and proper organisation of the work of attestation. Unfortunately, by the time that proper rules had been introduced for the regulation of this work, a very large proportion of the records in Puri and Cuttack had already been dealt with, and it was subsequently found that they had been attested under such inconsistent rules, and with such varying degrees of care and supervision, that they had all to be reattested in the years 1895 to 1898.

24. In paragraph 423 of his report Mr. Maddox has summarised the chief principles of attestation work which were determined by Mr. Maude in his rules of 1893, and in the following paragraphs he enumerates some of the more important matters which were either dealt with finally in those rules, or subsequently determined in the course of the conferences and discussions of 1894. The final decisions come to in respect of the chief of these points may be thus briefly summarised:—

Important questions affecting attestation work.

- (1) Attestation work was to be conducted either in each village or within three miles of it.
- (2) The Revenue officer was to be present throughout the proceedings, supervising the work of the muharrirs, dealing with objections and disputes, and finally interrogating each individual tenant as to the accuracy of the entries made in the records concerning his lands, his rent and his status.
- (3) The unit of the record was to be a *khatian*, containing all the lands held by one tenant on the same conditions in each village, lands held by one individual on differing conditions being entered in separate *khatians*. Thus revenue-free, *jagir*, *thani* and *pahi* lands were all to be entered in separate *khatians*.
- (4) The muharrirs were to have nothing to do with the determination of disputes, which was to remain in the hands of the Revenue officer alone.

From May, 1892, almost to the end of the re-attestation proceedings, Mr. Macpherson, as Director of Land Records and Agriculture, took a prominent part in all the discussions and correspondence which led to the determination of the above principles and to the removal of the difficulties which were encountered.

25. The progress made in attestation is referred to in paragraphs 424 and 436 of the report, and need not be reproduced here. In the earlier days of the

Progress and cost of attestation.

work many officers, in ignorance of the nature of the duties they had to perform, returned extravagant figures as representing their monthly outturn, and, on the other hand, when the reaction set in, and the responsible character and the difficulties of the work were more fully appreciated, a tendency to over refinement reduced the rate of progress too low. Eventually, when experience had led to the amendment of the rules and to the proper organization of the attestation camps, it was found that an Assistant Settlement Officer could attest about 20,000 plots in a month, and I think that this was a reasonable average rate of progress for the work, looking to the special circumstances that surrounded the operations in Orissa. The expenditure incurred upon attestation was very heavy, as might be expected from the above account of the proceedings. In paragraph 625 of his report Mr. Maddox estimates that it amounted to Rs. 4,80,000 in Cuttack, Rs. 1,80,000 in Balasore, and Rs. 2,05,000 in Puri, or Rs. 8,65,000 in all. In Cuttack, the total is swelled by the inclusion of the whole cost of the pay and establishment of the Settlement Officer, and the disproportionate cost in Puri is due to the fact that almost the whole of the work in that district had to be done twice over. The above figures give cost rates of Rs 233 per square mile for Cuttack, Rs. 105 for Balasore, Rs. 200 for Puri, and Rs. 180 for the Province as a whole.

26. I now come to the important question of the settlement of rents, the stage in the proceedings which followed next after the attestation of the records, and was preliminary to the final one, that of the assessment of the revenue. From the circumstances of the case it was obvious that the rents of a very large number of privileged tenants, which had remained untouched for sixty years, must be enhanced at the present settlement, while it was known that cultivation had largely extended during the same period, and that there were considerable areas in the possession of both landlords and tenants that had never been assessed to revenue or rent. At the time of the initiation of the proceedings very little appears to have been said on the subject, and the first pronouncement that is quoted by Mr. Maddox is that contained in a note written by Mr. Finucane in February, 1891. This note foreshadows so accurately the lines upon which rents were actually settled five years later throughout the area under settlement, that I need make no apology for quoting it also here. Mr. Finucane wrote:—

"It will probably be found that the rents of the *pahi* raiyats are as high as the land can afford to bear, and that they may be left undisturbed.

"The rents of *thani* raiyats, which, under the terms of the last settlement, ought to have remained unaltered for the past sixty years, will as a matter of course, have to be now enhanced, if they have not in fact been enhanced during the currency of the existing settlement.

"It is not easy to lay down *a priori* the principles on which such enhancements should be made. The full enhancement that may be demandable on the ground of rise in prices cannot, it is probable, be taken, because the rent fixed for *thani* raiyats at the last settlement were higher than the competition rents demanded from *pahi* raiyats.

"Neither can the rents of *thani* raiyats be fixed on the principle of raising them to those now paid by *pahi* raiyats. A middle course will have to be followed. The question is one regarding which the Settlement Officer should ascertain facts and ask for orders, before finally adopting any principle of assessment."

The above were, broadly speaking, the principles upon which rents were ultimately settled in Orissa for the important classes of tenants mentioned, although before they were finally adopted many experiments were made with the object of utilising the "prevailing rate" section of the Bengal Tenancy Act, in order to level up inadequate rents and to secure uniformity in the rents to be settled during our proceedings.

27. It is unnecessary to review at any length the immense amount of valuable work done in Orissa by Messrs. Maude, Nathan, Walsh and Taylor, under the guidance of Mr. Macpherson as Director of Land Records and Agriculture, during the years from 1892 to 1895, while working out rules for the settlement of rents, and investigating the various problems that accompanied the determination of the best method of dealing with the *baziasdars* and *kharidars*, with lands held by proprietors, with *jagirs* and other lands held from proprietors rent free or on quit-rents, and with the *jagirs* of *chaukidars*, village servants, *khandais* and *paiks*, or while devising methods by which

Early experiments in rent settlement.

rents could be settled expeditiously and inexpensively, and yet in accordance with the provisions of the Bengal Tenancy Act. The real position held by the various classes of tenants in Orissa was determined during this period, and the difficulties inherent in the procedure prescribed by the Bengal Tenancy Act for the settlement of rents were to some extent met by the publication of revised rules under that Act in 1894, while at the same time evidence was accumulated as to the rise in prices since the rents of privileged tenants had been settled at the last settlement, and the law under which it was held by the legal advisers of Government that no rents could be settled before the expiration of the old settlement was amended by the passing of Act V of 1894. While these and many other important matters were dealt with, however, no practicable scheme for the settlement of rents was devised, and at the close of the year 1895 it seemed as if nothing satisfactory could be done without some radical alteration of the law. The reason for this appears to be that during the whole of the earlier enquiries and experiments made with a view to the settlement of rents, the simpler plan advocated by Mr. Finucane was set aside in favour of the settlement of a rent for each field by means of a rate or a crop-map (erroneously called a soil map). A great deal of valuable time was spent in efforts to divide villages up into homogeneous blocks, each of which could be said to contain lands assessed to rent at the same rates, or which could be assessed by the Assistant Settlement Officer, in virtue of his knowledge of rates and rents generally, at some one rate which would be fair and equitable. The first and the most prominent result of these proceedings was the able report prepared by Mr. Nathan on the subject of the assessment of the Kotdes pargana in Puri, which was written by him in close communication with Mr. Maule, and submitted in July 1893. This report contained, besides a very large amount of valuable information, and many sound suggestions as to the status of various classes of tenants and the treatment to be accorded to particular classes of lands, an elaborate scheme for the settlement of rents within the pargana by means of these rate or crop maps, from which the prevailing rates payable in a village for lands growing certain crops were to be ascertained, and, after check with certain guiding rates obtained from a comparison of similar rates in neighbouring villages, were to form the basis for the enhancement of all inadequate rents in that village. A criticism of this report was written by Mr. Finucane in December, 1893, (reproduced in the appendices to Mr. Maddox's report) in which it was shown that the cost of the settlement of rents under this scheme would be prohibitive, and that the procedure advocated was of doubtful legality. In my opinion the adoption of this scheme would, in all probability, have occasioned a far larger expenditure than was anticipated at the time, and the proposals appear to me to suffer from the fatal defects that they relied far too much upon information to be supplied by landlords and their agents, that they were too complicated to be understood by, or to meet with the acceptance of, the people, and that they lent themselves to indifferent work in the hands of any less capable and conscientious officers than their authors. As an alternative to Mr. Nathan's plan, Mr. Finucane suggested a procedure based upon the principles enunciated in the note from which I have quoted in paragraph 26 above, but at the same time advised, with a view to the legal difficulty subsequently removed by Act V of 1894, that the duties of the settlement staff should be confined during the following two years to attestation and recording of status and existing rents. Seeing that the legal disability was almost immediately removed by legislation, it seems to me unfortunate that this advice was followed, and had the question of rent settlement been dealt with more completely in 1894 and the early part of 1895, I think that some delay in the realisation of the new revenue of the Province might have been avoided. Mr. Finucane's note was only partially approved by the Lieutenant-Governor (Sir Charles Elliott), who expressed his opinion at the same time that the lands of the Province should be assessed to rent with some reference to their agricultural value, and that soil rates were necessary to any such assessment. It was in accordance with these views that Mr. Taylor's subsequent experiment was made in the Bakhrabad pargana of Cuttack.

28. In September 1895 Mr. Maddox, then Settlement Officer of Balasore, after various experiments with soil maps, and after the consideration of several elaborate rate reports

that had been prepared by his Assistants, commenced to settle rents on the system suggested in Mr. Finucane's note of 1893, and in January 1896 he submitted for the approval of the Director and the Board a set of rules for the settlement of rents based on his proceedings of the previous months. While these rules carried out the orders which had already been passed as to the treatment to be accorded to particular classes of tenants, and in the matter of certain classes of land, they differed materially from all previous rules in their reversion to a simpler plan of settlement, and in their rejection of the whole system of rate maps, and crop or soil rates, and of the assessment of rents by the application of ascertained rates to the areas of the different classes of land contained in each tenancy. These rules were forwarded to Government by Mr. Macpherson in February 1896, with a letter which indicated that he was of opinion that no satisfactory system for the settlement of rents could be devised in the existing state of the law, and which was closely followed by a letter in which he proposed the withdrawal of the Province of Orissa from the operation of sections 101 to 103 of the Bengal Tenancy Act, and the settlement of rents under the provisions of Act VIII (B.C.) of 1879, to be re-enacted with amendments for the purpose. Mr. Macpherson left during the same month on nine months' furlough, during which period I officiated for him, while Mr. Maude also left on furlough and did not return to his appointment of Settlement Officer of Cuttack and Puri, Mr. Maddox succeeding him as Settlement Officer of the Province of Orissa, with three other members of the Imperial Civil Service in subordinate charge of the three districts under settlement.

29. As soon as Mr. Maddox's rules had been submitted to the Board, he was summoned to Calcutta to discuss them with the Director, and a conference was held by the Lieutenant Governor (Sir Alexander Mackenzie) at Belvedere to consider settlement matters in general, and the settlement of Orissa in particular. At this conference it was arranged that Mr. Maddox should bring his system of settlement of rents into force generally in all three districts, and that the senior member of the Board, Mr. (now Sir) C. C. Stevens, accompanied by the Director, should visit Orissa at an early date, to inspect the work in the field and determine the rules under which the settlement of rents should proceed. This visit was paid in March 1896, the rules drafted by Mr. Maddox were thoroughly examined and largely amended on the spot, after inspection of the work then in progress in all three districts, and the revised rules were submitted by the Board for the approval of Government in May of the same year. It is unnecessary to enter here into the lengthy correspondence that ensued with the Government of India, or to go into the details of the various modifications that were made in the rules as the work progressed. It will be sufficient to note that in January 1897 the Lieutenant-Governor paid a visit to Orissa, and dealt with all pending subjects connected with the settlement in a conference held at Cuttack, on the 25th and 26th of that month, and that alterations were then made in the rules to ensure that unduly low rents should not escape enhancement. This had already been provided for in a rule that dealt with collusive or beneficiary rents, but the amendment caused special attention to be drawn to the subject and undoubtedly did good, although it did not materially affect the amount by which the rents of raiyats were ultimately enhanced. The rules, as finally approved, have been reproduced as Appendix C attached to the final report. Under them the rents of the whole body of tenants in Orissa were successfully settled during the years 1898 to 1899, the basis of the proceedings being the proposal of a fair rent by the Settlement Officer, whether the existing or an enhanced rent, for the acceptance of the tenant, the immediate settlement of that rent if accepted by him, and the formal settlement of a fair rent under the provisions of the Bengal Tenancy Act in all cases in which the tenant proved unwilling to accept.

30. I will now proceed to explain how the more important classes of tenants were dealt with under these rules, and, for the sake of simplicity, I will take in order the same classes, including the *jamabandi khuridars* and revenue and rent free holders, that I have referred to in paragraphs 12 and 13 above.

Treatment of various classes of tenants.

Revenue and rent-free holders holding on confirmed titles were of course left in possession of their lands free of rent, but all lands found in their possession in excess of those thus granted to them were assessed to rent and settled with them as raiyati holdings, after an allowance of 10 per cent. had been made to cover any excess due to the greater strictness of our system of measurement, and with the proviso that small excess areas up to one quarter of an acre were not ordinarily to be assessed to additional rent. Correct figures are not available to show the excess area, or *taufir*, thus assessed to rent, but it is estimated by Mr. Maddox at 2,728 acres, now held at a rental of Rs. 6,500.

Jamabandi kharidadars were treated as tenure-holders under the Bengal Tenancy Act, and rents settled for them by deducting from the gross assets of each tenure a percentage equal to the percentage granted to them at the last settlement. The maximum limit of enhancement was fixed at 200 per cent., or two-thirds of the full assessment of the cultivated area, whichever gave the lower figure. The following are the results of this assessment:—

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent.	Enhancement (per cent)	Incidence of settled rent per acre.
1	2	3	4	5	6	7
		Acres.	Rs.	Rs.		Rs. A. P.
Cuttack	22,600	80,100	28,000	45,800	62	1 8 0
Balasore	3,480	14,900	10,700	16,900	58	1 2 2
Puri	1,000	2,400	2,700	3,600	33	1 8 0
Total	26,980	47,400	41,400	66,800	59	1 6 2

The new rents were fixed for the term of settlement.

Tankidars.—The rents of these privileged tenants were not disturbed, but excess areas held by them were treated in the same way as those found in the possession of revenue and rent-free holders. I can find no figures to show what area was thus treated or how much rent was assessed upon it. Both figures are probably very small.

Nisfi baziaftidars and *kamil baziaftidars*.—Mr. Maddox gives a full account of the treatment accorded to these tenants in paragraph 420 of his report. They were dealt with as raiyats whose special privileges had expired with the last settlement, but in consideration of the very low rents at which they were found to be holding, and to prevent the hardship that would have been caused by too sudden an enhancement of those rents, a strict limit was imposed on that enhancement, and they were eventually assessed to rents much below those paid by *thani* or *pahi* raiyats. The following table shows the results of the settlement of rents for these tenancies:—

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent.	Enhancement (per cent)	Incidence of settled rent per acre.
1	2	3	4	5	6	7
<i>Nisfi Baziafti.</i>		Acres.	Rs.	Rs.		Rs. A. P.
Cuttack	98,800	94,800	35,700	1,03,300	189	1 1 5
Balasore	48,300	78,200	22,900	68,000	197	0 13 11
Puri	36,400	59,400	33,100	67,300	103	1 1 1
Total	183,500	232,400	91,700	238,600	160	1 0 5
<i>Kamil Baziafti.</i>						
Cuttack	28,600	22,500	19,400	30,000	55	1 5 4
Balasore	15,700	25,300	14,800	23,300	57	0 14 10
Puri	5,400	6,500	6,100	8,300	34	1 4 2
Total	49,700	54,300	40,300	61,600	53	1 2 2
GRAND TOTAL	233,200	286,600	132,000	3,00,000	127	1 0 9

These rents were all settled for the term of the settlement.

Thani raiyats.—Under this head the settlement staff had to deal both with whole *thani* holdings that had descended entire from the last settlement, and also with the *thani-pati* or mixed holdings, in which the *thani* lands were not easily to be distinguished from the *pahi*. For the purposes of paragraph 15 above, the area and existing rents of the *thani* lands included in the mixed holdings have been adjusted, but it is not possible to separate all the figures for rents and incidence. The *thani* holdings having been held at the same rents since the date of the last settlement, they were enhanced generally wherever they were found to be lower than the *pahi* rents, which, as being competition rents, were accepted as the standard of the limit to which rents should ordinarily be enhanced. Owing to the over-assessment of *thani* lands which had been made in several tracts at the last settlement, it was frequently found that competition rents had not risen above them during the currency of the settlement. In these tracts no general enhancement was made, but excess area was everywhere assessed to rent at the village rate, after making an allowance of 10 per cent. for strictness of measurement, the whole area being dealt with as *thani*. All *thani* rents were settled for the term of the settlement.

The result of the working of these rules is shown below:—

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent	Enhancement (per cent).	Incidence of settled rent per acre.
1	2	3	4	5	6	7
<i>Thani.</i>						
		Acres.	Rs.	Rs.		Rs. A. P.
Outtack ...	25,800	41,700	1,14,000	1,30,900	6	2 14 5
Balasore ...	6,700	11,700	19,800	21,700	9.6	1 12 8
Puri ...	22,400	25,200	64,600	68,800	6.5	1 12 3
Total ...	54,900	58,600	1,98,400	2,11,400	6.5	2 6 2
<i>Thani-Pahi.</i>						
Outtack ...	30,200	14,200	2,12,800	2,25,200	5.4	2 10 10
Balasore ...	24,200	111,800	1,79,100	1,91,600	6.9	1 11 5
Puri ...	16,200	62,000	1,19,000	1,22,900	4	1 16 2
Total ...	60,600	289,000	5,10,900	5,29,700	5.7	2 1 4
GRAND TOTAL	115,500	347,600	7,09,300	7,51,100	5.9	2 2 6

Chandina tenancies.—No general enhancement was made of the rents of these tenancies, either in villages or towns, but excess areas were assessed to rents at special rates. The result was a nominal enhancement, and at the conclusion of the settlement the assessment of these holdings for the whole Province stood thus:—

Number of holdings.	Area.	Rent.	Incidence per acre.
	Acres.	Rs.	Rs. A. P.
41,800	9,100	41,700	4 9 4

These rents were also settled for the term of the settlement.

Pahi raiyats.—These include all the tenants classed under the Bengal Tenancy Act as settled, occupancy or non-occupancy raiyats, the holdings of *thani* raiyats and all mixed (*thani-pahi*) holdings being excluded. The rents of these raiyats were considerably enhanced by the zamindars during the currency of the last settlement, and have been held throughout our proceedings to be competition rents, and consequently not liable to any general enhancement. They have, however, been enhanced on the ground of excess area, or where any particular rents were found to be unreasonably low, either through collusion or fraud, or because they were specially granted as beneficial rents by the zamindar. The working of the rules for the treatment of these rents

produced the following results; I include non-occupancy raiyats:-

DISTRICT.	Number of holdings.	Area.	Existing rent.	Settled rent.	Percentage of enhancement.	Incidence of settled rent per acre.
1	2	3	4	5	6	7
Cuttack ...	374,800	Acres. 427,800	Rs. 11,58,100	Rs. 12,16,600	6	Rs. A. P. 2 13 7
Balasore ...	231,300	370,800	6,18,400	6,81,300	10·1	1 13 5
Puri ...	94,600	190,200	2,40,200	2,54,800	6·1	1 15 4
Total ...	700,600	927,800	20,16,700	21,52,700	6·7	2 5 1

The greater enhancement in Balasore is due to the larger quantity of excess area found in that district.

These rents were settled under the Bengal Tenancy Act for fifteen years in the case of settled and occupancy raiyats, and for five years in the case of non-occupancy raiyats.

Jagirs and *minha* lands.—Mr. Maddox has dealt fully with the various subdivisions of these lands in paragraphs 466 to 473 of the report, and I need not reproduce his account of them here. It will be sufficient to note that homesteads and other lands confirmed as tenable without payment of rent at the last settlement were left unassessed; that rent-free grants made by the zamindars during the currency of the settlement were assessed to revenue but not to rent, and that the *jagirs* of village servants were regranted to them, while those of *chaukidars*, *patwāris*, *khandaits*, and *paiks* were resumed and assessed to rent.

The existing rents of *under-raiyats* of all kinds were settled as fair rents, unless the landlord applied for an enhancement, in which case his application was dealt with under the law. Very few such applications were received.

Produce rents were not disturbed, unless either the landlords or the tenants applied for their commutation under section 40 of the Bengal Tenancy Act. It was only in a very limited number of cases that the Settlement staff were called upon to take action under this section.

Lands held in *khas* possession by the proprietors were assessed to revenue at their letting value, and the amount thus assessed was included in the assets of the estate. The area and the valuation of these lands have been shown in paragraph 15 above.

31. The aggregate effect of the working of the rules that have been briefly described in the two last preceding paragraphs may be summarised in the following statement showing the enhancement of the assets effected

General results of the settlement of rents.

by the Settlement staff in the course of the proceedings. Further figures will be given in a later paragraph, in which the general results of the Settlement operations will be summarised, to show how these assets compare with those ascertained and recorded at the last settlement:—

DISTRICT.	Number of holdings.	Area.	Existing assets.	Settled assets.	Percentage of enhancement.	Incidence of settled assets per acre.
1	2	3	4	5	6	7
Cuttack ...	660,600	Acres. 827,500	Rs. 18,47,400	Rs. 20,72,900	12	Rs. A. P. 2 8 2
Balasore ...	370,390	692,300	9,88,800	11,51,400	16	1 10 7
Puri ...	204,400	373,300	5,72,700	6,48,300	12	1 11 7
Total ...	1,235,390	1,888,000	34,09,900	38,67,600	13	2 1 0

Of the total number of rents settled, Mr. Maddox estimates that in 54 per cent, the existing rents were retained; in 13 per cent. an enhancement was

made on the ground of excess area; in 24 per cent. an enhancement was made on other grounds; while 3 per cent were reduced for loss of area and 6 per cent. were tenancies newly assessed.

I believe that the assets of the area dealt with during our proceedings have been adequately enhanced, with a due regard both to the rights of Government and the prosperity of the people. It is a noticeable fact that the zamindars, who would have benefited largely by a general enhancement of rents, have throughout deprecated any such proceeding, on the ground that they would find much difficulty in realising rents thus raised, and at the same time the general incidence of the assets does not compare unfavourably with that in neighbouring permanently-settled tracts and in adjoining districts. It may be that the opening of the East Coast Railway will greatly increase the prosperity of the Province and enhance the value of these lands, but for the present I see no reason to suppose that the rents that have been settled for them are other than fair and equitable.

32. I am unable to find in the report any statement of the annual progress made in the settlement of rents, but I gather from the annual reports of the years 1895 to 1899 that the following represents roughly the progress in each of those years:—

Survey year (from October 1st to September 30th).	Number of holdings for which rents were settled.
1894-95	13,950
1895-96	163,238
1896-97	868,040
1897-98	430,446
1898-99	45,700

It was undoubtedly owing in great part to the docility of the people, and the readiness with which they accepted the rents proposed to them, that the above progress was attained. Had any considerable numbers of them refused to attend, or declined to accept the proposals made, and had the strict provisions of the unamended Tenancy Act thus compelled us to settle a large proportion of the rents with all the formalities of the Civil Procedure Code, there can be little doubt that we should have experienced all the difficulties foreseen by Messrs. Macpherson, Maude, and Nathan, and should have found the task set before us an almost impossible one. The proceedings were not on the whole expensive, and in paragraph 625 of his report Mr. Maddox estimates that the settlement of rents cost Rs. 1,86,000 in Cuttack, Rs. 1,01,000 in Balasore, and Rs. 58,000 in Puri, or Rs. 3,45,000 in all, giving a rate of Rs. 71-9 per square mile, or As. 1-10 per acre.

33. The correspondence that led to the final orders of the Secretary of State on the subject of the percentage of the assets that was to be taken as revenue by Government, and the term for which the settlement was to be made with the zamindars, will be found in Appendix A to the report, and it is sufficient to state here that the Secretary of State approved the proposal made by the Government of Bengal, and supported by the Government of India, that from 50 to 55 per cent. of the assets should be taken as revenue, adding at the same time a warning that the limit of 55 per cent. should be very sparingly exceeded. In the matter of the term of the settlement, the Secretary of State differed from both Governments in their recommendation of a 20-year settlement, and directed that the new settlement should be concluded for a term of thirty years. Mr. Maddox prefaces his Chapter on the subject of the work of Assessment to Revenue with a note to the effect that this task comprised the settlement of the revenue of nearly 6,400 estates situated in 11,000 villages; that some villages contained portions of more than 60 estates, while some estates were situated in more than 100 villages. I may add to this that the settlement of revenue was made for every individual estate by Mr. Maddox himself, and that, at the present time, the proprietors of only five estates have refused to accept the assessment that has been made. The rules under which this considerable work was carried out, and the forms in which the necessary statistics were compiled,

are given at length in Appendix C, and the essential parts of them have been also reproduced by Mr. Maddox in paragraphs 478 to 481 of his report. In cases in which the settled revenue did not exceed Rs. 100, the settlement was made by Mr. Maddox, and in all other cases the settlement was submitted for the approval of the Commissioner of the Division. When, however, the Commissioner differed from the Settlement Officer, or when it was proposed to take more than 55 or less than 50 per cent of the assets, the proceedings were subject to the final confirmation of the Board. The rules worked smoothly and have produced an adequate increase of revenue. The zamindars have been convinced of the leniency of the Government proposals, which have been carried out with great care and tact by Mr. Maddox, and the result has been a Settlement fair to all parties, with an increased revenue that the Collectors should find no difficulty in realising.

34. The following is a brief *resumé* of the principal results of the settlement of revenue, which occupied a large proportion of the Settlement staff from 1897 up to 1899. The figures given take no account of the comparatively insignificant deductions to be made during the first few years on account of *ra-asti* allowances; they are the final figures of the revenue that will be ultimately realised from the year 1907. Including some Rs. 40,000 assessed on Government Estates, in which, of course, 100 per cent. of the assets is taken by Government, the following figures show the general results of the present settlement, as compared with the existing state of affairs found by the Settlement Department:—

District.	Existing assets.	EXISTING REVENUE.		Settled assets.	SETTLED REVENUE.	
		Percentage of existing assets.	Amount.		Per-centage.	Amount.
1	2	3	4	5	6	7
	Rs.		Rs.	Rs.		Rs.
Cuttack	18,47,400	38	7,14,100	20,72,900	53	10,99,300
Balasore	9,88,000	38	3,77,390	11,51,400	55	6,29,073
Puri	5,73,700	51	2,92,800	6,43,300	58	3,76,700
Total	34,09,900	41	13,84,190	38,66,000	54	21,05,073

The actual percentage of the assets taken as revenue thus works out to 54 per cent., and Mr. Maddox explains in paragraph 555 the circumstances in which the percentage varies in different districts.

The increase in revenue as shown in the above table amounts to 54 per cent. in Cuttack, 67 per cent. in Balasore, and 28 per cent. in Puri, or 52 per cent. for the Province as a whole. The incidence of the new revenue is compared with the incidence of revenue at the last settlement in the table below:—

District.	ASSESSED AREA.		REVENUE.		INCIDENCE.	
	Last settle-ment.	Present settlement.	Last settle-ment.	Present settlement.	Last settle-ment.	Present settle-ment.
1	2	3	4	5	6	7
	Acres.	Acres.	Rs.	Rs.	Rs. A. P.	Rs. A. P.
Cuttack	621,000	822,800	7,14,100	10,99,300	1 2 5	1 5 3
Balasore	493,300	632,900	3,77,390	6,29,073	0 12 3	0 14 3
Puri	302,400	372,300	2,92,800	3,76,700	0 15 3	1 0 3
Total	1,416,800	1,828,000	13,84,190	21,05,073	0 16 7	1 1 10

The effect of the present settlement on the incomes of the zamindars as they existed before it was undertaken can be obtained from the first table in this paragraph. The following are the resultant figures :—

DISTRICT.	Income before settle- ment.	Income after settlement.	Percentage of reduction.
	Rs.	Rs.	
Cuttack	11,33,300	9,73,600	14
Balasore	6,11,510	5,22,327	14
Puri	2,80,900	2,66,600	5
Total	20,25,710	17,62,584	13

It is noticeable that in Puri, where Government has taken 58 per cent. as revenue, the reduction in the income of the zamindars is only 5 per cent.

The figures for the income of the zamindars at the time of the last settlement, which have been given in paragraph 15 above, show that whereas they then received an income of Rs. 7,51,010, they will now receive an income of Rs. 17,62,000, so that while the revenue has been enhanced by Rs. 7,08,200 since the last settlement, or by 52 per cent., the income of the zamindars has increased by Rs. 10,08,000, or by 133 per cent.

The following statement shows the results of the settlement of revenue upon the incomes of the proprietary tenure-holders, the class that was bound to suffer most on the occasion of the re-settlement of the revenue. The enhancements have been softened in almost all cases by *rasadi* allowances :—

DISTRICT.	Existing income as shown in paragraph 15.	SETTLED.			Percentage of reduc- tion of income.
		Assets.	Revenue.	Balance.	
	2	3	4	5	
	Rs.	Rs.	Rs.	Rs.	
Cuttack	1,01,693	2,38,902	1,62,284	76,618	25
Balasore	49,672	1,19,435	85,801	33,631	32
Puri	96,332	2,92,530	2,23,981	68,549	29
Total	2,47,697	6,50,867	4,72,069	1,78,798	28

35. I am unable in this review to do justice to the great mass of office work, in the compilation of statistics, the correction of the records, the preparation of fair copies, and the classification of papers, that was done at head-quarters and at specially selected centres during the course of the operations. The fact that some 12,000 village records had to be dealt with, in addition to the completion reports and similar assessment papers for 6,400 estates, will serve to give some indication of the formidable programme that had to be got through, and the figures in paragraph 488 of the report show that some 21 million entries for separate fields were made in the course of the copying work alone, at a cost of over one and a quarter lakhs of rupees. The work connected with the publication of the records in each village both in draft and finally, was also severe, and the final arrangement of all papers for deposit in the Collectorate record-room was the subject of much careful consideration, and occupied

a large establishment for an appreciable time. This and some details concerning the case-work under the Bengal Tenancy Act are dealt with in paragraphs 482 to 500 of the report. The following are the case-work figures, fortunately small, and it is a subject for sincere congratulation that the people of Orissa shewed so little inclination to take advantage of the opportunities for litigation afforded them by the Act under which the operations were conducted:—

District.	Objections under section 105 (section 103A of the amended Act).	Disputes under section 106.
Cuttack	... 32,120	5,751
Balasore	... 19,651	4,756
Puri	.. 11,747	764
Total	63,518	11,271

The disputes raised in the district of Balasore were mostly connected with lands in the neighbourhood of the town of Balasore itself, and were undoubtedly to a great extent the work of touts and petty legal practitionerse. The cost of the miscellaneous work described in this paragraph, and of the disposal of the cases entered in the above statement, is given by Mr. Maddox in paragraph 625 of his report as follows:—

District.	Miscellaneous work.	Case- work.
	Rs.	Rs.
Cuttack ...	61,000	1,82,000
Balasore ...	50,000	1,08,000
Puri ...	15,000	60,000
Total	1,26,000	3,50,000

36. I have included so many scattered figures in the course of the present review that it may be as well to briefly summarise the principal results of the settlement proceedings in tabular form for purposes of ready reference. I consequently give below some of the more important figures relating to (1) Extension of cultivation, (2) Settlement of rents, (3) Assessment of revenue, and (4) the cost of the proceedings.

(1) *Areas*.—The following table shows the increase in areas cultivated, and in those liable to assessment, during the currency of the past settlement:—

DISTRICT	CULTIVATED.			ASSESSED.		
	Last settlement.	Present settlement.	Percent- age of increase.	Last settlement.	Present settlement.	Percent- age of increase.
1	2	3	4	5	6	7
	Acres.	Acres.		Acres.	Acres.	
Cuttack ...	697,000	920,000	32	621,000	822,500	33
Balasore ...	554,000	776,080	40	493,200	692,200	40
Puri ...	377,000	464,000	23	302,400	373,300	23
Total ..	1,628,000	2,160,000	33	1,416,600	1,888,000	33

(2) *Rents*.—The statements below give comparative figures for the rents of the most important classes of tenants, and for the total assets at various periods:—

(a) *Rents*.—Totals for the Province:—

CLASS OF TENANCY.	LAST SETTLEMENT.			EXISTING			PRESENT SETTLEMENT.				
	Area.	Rent.	Incidence per acre.	Area.	Rent.	Incidence per acre.	Number.	Area.	Rent.	Incidence per acre.	Enhancement per cent. over existing rents.
1	2	3	4	5	6	7	8	9	10	11	12
Bani/tidars	Area.	Rs.	Rs. A P.	Area.	Rs.	Rs. A P.		Area.	Rs.	Rs. A P.	
Thani	301,800	1,05,500	0 5 7	281,600	1,39,000	0 7 4	235,200	261,000	3,00,000	1 0 0	137
Thani pahi	337,700	7,05,300	2 4 3	386,600	1,88,500	2 3 0	14,300	88,000	2,11,000	2 6 3	65
Pahi	370,000	8,38,700	1 9 1	259,000	5,10,000	1 15 0	60,000	330,000	5,30,700	2 1 4	84
				927,000	20,16,700	2 2 0	700,000	627,000	21,52,700	2 5 1	67

(b) *Assets*.—District by district:—

District.	Area.	Rent.	Incidence per acre.	Area.	Rent.	Incidence per acre.	Area.	Rent.	Incidence per acre.	Enhancement per cent.
Cuttack	621,000	11,21,000	1 10 10	822,600	18,47,600	2 4 0	600,000	627,500	20,73,000	2 8 4
Balasore	479,200	8,75,600	1 2 8	697,200	9,88,500	1 6 10	270,200	712,300	11,51,400	1 10 7
Puri	332,400	6,41,000	1 7 4	378,300	7,73,700	1 5 7	204,400	374,300	6,43,300	1 11 7
Total	1,410,600	21,38,200	1 8 0	1,898,000	35,09,800	1 12 10	1,074,600	1,714,000	38,67,600	2 1 0

(3) *Revenue*.—The following table summarises the results of the settlement of Government revenue:—

DISTRICT.	REVENUE AT THE LAST SETTLEMENT.			EXISTING REVENUE AT TIME OF SETTLEMENT.			SETTLED REVENUE.			Enhancement per cent.
	Percentage of assets.	Amount.	Incidence.	Percentage of assets.	Amount.	Incidence.	Percentage of assets.	Amount.	Incidence.	
1	2	3	4	5	6	7	8	9	10	11
Cuttack	64	Rs. 7,14,100	0 12 5	34	Rs. 7,14,100	0 11 11	53	Rs. 10,99,500	1 5 1	54
Balasore	65	3,77,200	0 12 3	39	3,77,200	0 5 8	55	6,25,000	6 14 0	67
Puri	61	2,32,800	0 15 6	51	2,02,900	0 12 6	58	3,76,700	1 0 2	26
Total	64	13,44,100	0 15 7	41	13,94,100	0 11 9	64	21,05,500	1 1 10	69

(4) *Cost*.—The cost of the proceedings may be thus summarised. The figures are taken from Chapter XXV of the Final Report, with some necessary adjustments of the survey expenditure. The total area dealt with was 4,797 square miles, excluding Khurda, the Eklirajats, and Killas Aul, Darpan and Madhupur:—

District.	Survey and khana-puri.	Khanapuri inspection by the Settlement Department.	Attestation.	Rent settlement.	Revenue assessment.	Miscellaneous.	Total.
1	2	3	4	5	6	7	8
(a) Expenditure—	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Cuttack	4,32,600	76,000	4,90,000	1,86,000	1,90,000	2,43,000	16,01,600
Balasore	2,74,500	33,000	1,80,000	1,01,000	67,000	1,58,000	8,13,600
Puri	2,24,400	40,000	2,06,000	68,000	38,000	76,000	6,40,000
Total	9,81,400	1,49,000	8,66,000	3,46,000	2,96,000	4,76,000	30,60,000
(b) Rate per square mile—							
Cuttack	209	36	233	90	92	118	779
Balasore	160	19	106	69	39	92	474
Puri	219	39	200	66	37	74	626
Total	194	31	180	72	61	99	637

37. Mr. Maddox touches upon the question of the maintenance of the record in paragraph 501, and quotes in full in that paragraph certain views on the subject that I have recently had the honour of submitting for the consideration of the Board and of Government. The history of the question as it affects Orissa is to be found in paragraphs 9 to 11 of Mr. Finucane's letter No. 238T.R., dated 12th May 1897, printed as Appendix A-11 to this report, and the full discussion of the principles involved in it is recorded in the minutes of the proceedings of a conference in Cuttack, contained in Appendix A-10. The present position of the question is that a draft Bill for the imposition of a patwari cess, and for the maintenance of the record by means of a local establishment of patwaris, with draft rules to be published under it, has been drawn up by the Settlement Department and submitted to the Board and to Government, but opportunity has been taken at the same time, with the permission of His Honour the Lieutenant-Governor, to represent again the very strong objections that are felt by the local officers and myself to the introduction of the proposed scheme, and the extremely heavy expenditure which will be involved in carrying it out. This representation is now before His Honour the Lieutenant-Governor, who is, I understand, awaiting the receipt of some further information as to the experience obtained in other provinces before dealing finally with it. In order to obtain this information it has been found necessary to make a reference to the Settlement Departments of the North-Western Provinces and the Central Provinces. Their replies have recently been received, and the required report has now been submitted to the Board.

38. In various paragraphs throughout the Final Report Mr. Maddox has made recommendations affecting the general administration of the Province and other Departments of Government, which are worthy of special attention, and which will in most cases doubtless form the subject of separate correspondence. I need do no more than indicate the more important of these recommendations, in order that they may not be inadvertently overlooked.

In paragraphs 23 to 27, 47, and 87 to 90 some valuable suggestions are made on the subject of canals and embankments, which will doubtless receive the attention of the Public Works Department. A separate representation is being submitted to the Board on the subject of the devastation caused by the floods which pour through the Adlabad breach in Puri.

In paragraphs 103 to 118 the subject of irrigation and the imposition of an owner's rate on lands irrigable from, or protected by, canals is dealt with. The question of an owner's rate will be specially reported upon by me, under the orders of Government, at an early date.

In paragraph 305 some recommendations are made, with which I do not wholly agree, on the subject of the recovery of rents from proprietary tenure-holders by the zamindars.

There are some noticeable remarks contained in paragraph 309 on the creation of middlemen by the State in *khas mahals*.

In paragraph 344, Mr. Maddox makes certain recommendations on the subject of rent *kists*. The question of *kists* for the payment of revenue is dealt with in paragraph 565.

The question of the further extension of the provisions of the Bengal Tenancy Act is treated of in paragraphs 353 to 361.

Some suggestions as to the settlement procedure to be adopted on the occasion of the next settlement of Orissa, which have also an important bearing on the conduct of all large settlements in Bengal, are contained in paragraph 376.

In paragraph 456, Mr. Maddox expresses the regret—shared with him by most Settlement Officers in Bengal—that the power of reducing as well as of enhancing rents is not commonly entrusted to them.

The important proposals made in paragraph 474 for the inspection and preservation of the lands reserved as grazing and cremation grounds will not, I hope, be overlooked by the local officers or by Government.

Some suggestions as to the treatment of *jalpahi* lands in Balasore are made in paragraph 611.

39. In conclusion, I would venture to invite the attention of the Board and of Government to the services rendered by those officers who have been mainly instrumental in carrying through the extensive operations that have been reviewed above.

Of the subordinate officers of the Survey Department I am unable to speak with knowledge. I believe that Messrs. R. C. Ewing and A. W. Smart are worthy of the commendation expressed by Mr. Maddox. The Board are, however, well aware of the great value of the services which were rendered by Colonel Sandeman and Captain Crichton throughout the survey operations in Orissa. Colonel Sandeman brought an extensive experience of work in other parts of India to bear upon those operations when they were entering their most important stage, and completely reorganised the system under which the Survey and Settlement Departments jointly controlled the work. Captain Crichton equally identified himself with the interests of good survey and *khanapuri*, and rendered capable assistance to the Director of Bengal Surveys in every detail of the proceedings.

Mr. Finucane, I.C.S., C.S.I., as Director of Land Records and Agriculture, issued the first instructions for the guidance of Assistant Settlement Officers, and subsequently indicated the broad principles and lines of procedure upon which rents were eventually settled throughout the province.

From May 1892 up to November 1897, with one brief interval, Mr. W. C. Macpherson, I.C.S., directed and supervised every detail of the operations of the Settlement Department. During that period he constantly visited Orissa and conferred with the officers of his Department on the spot, while in a large number of valuable reports he brought together the information collected by them on multifarious subjects connected with the work, and either determined the principles upon which most of the important questions connected with the conduct of the operations should proceed, or presented those questions in a complete form for the determination of Government. During the stages of record-writing and attestation, in the experiments undertaken for the determination of the principles and methods to be adopted in the settlement of rents, in all the operations connected with the assessment of revenue, and in almost every detail of the office work involved in these operations, Mr. Macpherson's assistance and advice were never wanting, and the recommendations made by him to the Board and to Government were in almost all cases accepted and approved.

Mr. W. Maude, I.C.S., came to Orissa as Settlement Officer in November 1892, and left after his health had failed in February 1896. He took up the work at a most critical time, when it was suffering from want of organisation and much ignorance of the essential principles upon which it should be conducted. Mr. Maude rapidly evolved rules for record-writing and attestation, thoroughly organised these stages of the work, and by unremitting inspection raised the standard and the quality of the work done by a large staff of subordinates. He was also intimately associated with the successful labours of Mr. Macpherson during the three and a half years of his stay in Orissa, and on several occasions received the special thanks of Government for the services he rendered.

Mr. E. H. C. Walsh, I.C.S., was connected with the proceedings for a short period, in the years 1891 to 1892, and distinguished himself by sound work at a time that it was sadly needed.

Mr. Ambika Charan Sen of the Statutory Civil Service worked for some four years as an Assistant Settlement Officer in Orissa, and acquired a considerable knowledge of the Province, which has been utilised by Mr. Maddox, with cordial acknowledgments, in his report.

The services of Mr. R. Nathan, I.C.S., as an Assistant Settlement Officer during the period from November 1891 to February 1894, were of great value to the proceedings. Mr. Nathan contributed largely to the right determination of the principles which should govern record-writing and attestation, and in his report on the Kotdes pargana, which was based on experimental assessment work of an elaborate nature in no fewer than four hundred villages, he indicated the lines upon which some of the chief difficulties attending the work should be dealt with. Mr. Nathan's energy and devotion to his duties resulted in the breakdown of his health. His departure on sick leave in 1894 was a serious loss to the Department.

Messrs. J. G. Cumming and C. A. Radice of the Imperial Civil Service both rendered great assistance in the earlier stages of the work, in the inspection of *khanapuri*, and in the conduct of attestation.

Mr. Hugh McPherson, I.C.S., did much valuable work in Puri from 1896 to 1898, his capacity for organisation being of great service in coping with the difficulties met with in the final completion of the work in that district. His excellent report on the operations in Puri is printed as an appendix to Mr. Maddox's report.

Mr. Maddox very cordially acknowledges the services of Mr. J. E. Webster, I.C.S., who was his right-hand man for four years, both as Assistant Settlement Officer in charge of Cuttack and as superintendent of the large amount of office work done in the head-quarters office. Mr. Webster has rendered excellent service in the preparation of rules and forms, in the energetic and tactful inspection of a considerable staff of subordinates, and in the compilation of the Final Report.

Mr. H. D. deM. Carey, I.C.S., was a member of the settlement staff for two years, and Mr. Maddox testifies to the value of the services rendered by him in the drafting of rules and instructions, and in the preparation of the forms for the completion reports.

Mr. W. B. Thomson, I.C.S., rendered much assistance to the work for over two years, from 1894 to 1897, when his health unfortunately failed him, and he had to revert to the general line.

The services of Mr. Douglas H. Kingsford, the most junior of the members of the Imperial Civil Service who have been connected with the settlement of Orissa, have been by no means the least conspicuous. Mr. Kingsford joined the Department in 1895, and in 1897 was placed in subordinate charge of the operations in the district of Balasore, a responsible and onerous post. Mr. Kingsford has performed his duties with much ability and energy, and his capable report on the work in Balasore, which is published as an appendix to the Final Report, displays considerable knowledge of the people among whom he laboured.

Among the Deputy and Sub-Deputy Collectors appointed from time to time as Assistant Settlement Officers there were many who did good work, some who succeeded only fairly, and a few who proved definite failures. A considerable proportion were unable to bear the strain of work and exposure involved in the conduct of their duties, and were consequently unable to do their abilities justice or to bring their labours to a wholly successful termination. The casualty list has indeed been a heavy one throughout the operations, and the comparatively short list of officers in these grades that I now submit for the favourable consideration of Government would have been much lengthened had several officers of promise been physically strong enough to remain at their posts for a longer period.

I can myself certify to the admirable work done by the officers named below, whom I now recommend to the favourable notice of the Board and Government for able and loyal service in the settlement of Orissa:—

Babu Jamini Mohan Das,	Deputy Magistrate and Deputy Collector.	
„ Govinda Chandra Das Gupta,	Ditto	ditto.
„ Sri Gopal Bhattacharya,	Ditto	ditto.
„ Sriram Chandra Bose,	Ditto	ditto.
„ Jotindra Mohan Sinha,	Ditto	ditto.
Mr. James Taylor	Ditto	ditto.
Babu Prasanna Kumar Banerji,	Ditto	ditto.
Akshoy Kumar Sen	Ditto	ditto.
Giris Chandra Dutt,	Ditto	ditto.
Jogendra Narain Mitra, formerly Personal Assistant to the Settlement Officer of Orissa, now Deputy Magistrate and Deputy Collector.		
Abhoy Persadh Das,	Sub-Deputy Magistrate and Sub-Deputy Collector.	
Hara Krishna Mahanti,	Ditto	ditto.
Maulavi Mahomed Chainuddin,	Ditto	ditto.
Babu Jagannath Datta,	Sadar Kanungo, Balasore.	

I have reserved to the last my notice of the exceptional services which have been rendered by Mr. S. L. Maddox, I.C.S., in the course of this settlement.

Mr. Maddox joined as an Assistant Settlement Officer in Balasore in October 1892, and was almost continuously employed on settlement duty in the Province up to December 1899. In October 1894, he was placed in independent charge of the operations in Balasore, and from March 1896 he has

held the very responsible post of Settlement Officer of the whole Province. For seven years he has given his whole abilities and energies to the efficient conduct of these proceedings, working with an unceasing devotion to his duties that has seriously affected his eye-sight and his health. He has impressed with the mark of his ability every stage of the work, and is directly responsible for the organisation and completion of the settlement of rents for one and a half million tenants, and for the assessment to revenue of nearly six thousand four hundred estates. The final success of the settlement is due in no small degree to the loyalty, energy and resource displayed by him, to his consideration for, and sympathy with, the people of Orissa, and to his tactful control of a staff which sometimes numbered over forty officers.

I have the honour to be,

SIR,

Your most obedient servant,

P. C. LYON,

*Director of the Dept. of Land Records
and Agriculture, Bengal.*

